DOCUMENT RESUME

ED 206 958 CG 015 396

AUTHOR Johnston, Lloyd D.; And Others
TITLE Highlights from Student Drug Use in America 1975-1980.
INSTITUTION Michigan Univ., Ann Arbor. Inst. for Social Research.
SPONS AGENCY National Inst. on Drug Abuse (DHHS), Rockville, Md. Div. of Research.
REPORT NO DHHS-ADM-81-1066
PUB DATE 80
GRANT NIDA-3-R01-DA-01411-06
NOTE 116p.
AVAILABLE FROM National Clearinghouse for Drug Abuse Information, 5600 Fishers Lane, Rockville, MD 20857 ($4.00).

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Adolescents; *Drug Use; High Schools; *High School Seniors; *Illegal Drug Use; Longitudinal Studies; Program Descriptions; *Student Attitudes; *Student Behavior; Trend Analysis

ABSTRACT

This report presents findings from a national survey of the 1975-80 high school classes, focusing on drug use and related attitudes of American high school seniors. The materials highlight data on grade of first use, usage trends at earlier grade levels, intensity of drug use, attitudes and beliefs about various types of drug use, and students' perceptions about their social environment. A description of the research is provided in the introduction, followed by an overview of key findings from 1980 data, e.g., a decline in the use of cigarettes, marijuana, PCP, inhalants, and barbituates, and stability in the use of cocaine and heroin. An increase in the use of stimulants and methaqualone is reported, accompanied by an increase in the proportion of seniors who use illicit drugs other than marijuana. The conclusion reflects the continued trend of widespread drug use among high school students. (NRB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED206958

1

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Highlights From
STUDENT DRUG USE IN AMERICA 1975–1980

by
Lloyd D. Johnston, Ph.D.
Jerald G. Bachman, Ph.D
Patrick M. O'Malley, Ph.D.

The University of Michigan
Institute for Social Research

National Institute on Drug Abuse
Division of Research
5600 Fishers Lane
Rockville, Maryland 20857

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Alcohol, Drug Abuse, and Mental Health Administration

CG 015396

This publication was written by the principal investigators and staff of The Monitoring the Future project, at the Institute for Social Research, The University of Michigan, under Research Grant No. 3 RO1 DA 01411-06 from the National Institute on Drug Abuse.

Public Domain Notice

All material appearing in this volume is in the public domain and may be reproduced or copied without permission from the Institute or the authors. Citation of the source is appreciated.

CONTENTS

	Page
Introduction	1
Content Covered in this Report	1
Purposes and Rationale for the Research	2
Research Design and Procedures	3
Representativeness and Validity	5
Overview of Key Findings	7
Prevalence of Drug Use	11
Prevalence of Drug Use in 1980: All Seniors	11
Prevalence Comparisons for Important Subgroups	19
Sex Differences	19
Differences Related to College Plans	21
Regional Differences	23
Differences Related to Population Density	25
Recent Trends in Drug Use	27
Trends in Prevalence 1975-1980: All Seniors	27
Trend Comparisons for Important Subgroups	36
Sex Differences	36
Differences Related to College Plans	45
Regional Differences	45
Differences Related to Population Density	47
Use at Earlier Grade Levels	51
Grade Level at First Use	51
Trends in Use at Earlier Grade Levels	53
Degree and Duration of Highs	71
Trends in Degree and Duration of Highs	75
Attitudes and Beliefs about Drugs: Current Status and Trends	77
Perceived Harmfulness of Drugs	78
Personal Disapproval of Drug Use	80
Attitudes Regarding the Legality of Drug Use	83
The Legal Status of Marijuana	85
The Social Milieu: Current Status and Trends	89
Perceived Attitudes of Parents and Friends	89
Exposure to Drug Use by Friends and Others	98
Perceived Availability of Drugs	103
Implications for Validity of the Self-Reported Usage Questions	106
Other Recent Findings from the Study	109

LIST OF TABLES

Tables		Page
1.	Prevalence (Percent Ever Used) of Sixteen Types of Drugs: Observed Estimates and 95% Confidence Limits (1980)	12
2.	Prevalence (Percent Ever Used) and Recency of Use of Sixteen Types of Drugs (1980)	15
3.	Lifetime Prevalence of Use of Sixteen Types of Drugs by Subgroups, Class of 1980	20
4.	Annual Prevalence of Use of Sixteen Types of Drugs by Subgroups, Class of 1980	22
5.	Thirty-Day Prevalence of Use of Sixteen Types of Drugs by Subgroups, Class of 1980	24
6.	Trends in Lifetime Prevalence of Sixteen Types of Drugs	28
7.	Trends in Annual Prevalence of Sixteen Types of Drugs	29
8.	Trends in Thirty-Day Prevalence of Sixteen Types of Drugs	30
9.	Trends in Thirty-Day Prevalence of Daily Use of Sixteen Types of Drugs	31
10.	Grade of First Use for Sixteen Types of Drugs, Class of 1980	52
11.	Trends in Perceived Harmfulness of Drugs	79
12.	Trends in Proportions Disapproving of Drug Use	82
13.	Trends in Attitudes Regarding Legality of Drug Use	84
14.	Trends in Attitudes Regarding Marijuana Laws	86
15.	Trends in Parental Disapproval of Drug Use	90
16.	Trends in Proportion of Friends Disapproving of Drug Use	91
17.	Trends in Proportions of Friends Using Drugs	101
18.	Trends in Reported Availability of Drugs	105

LIST OF FIGURES

Figures		Page
A.	Prevalence and Recency of Use Eleven Types of Drugs, Class of 1980	13
B.	Thirty-Day Prevalence of Daily Use Eleven Types of Drugs, Class of 1980	18
C.	Trends in Annual Prevalence of Illicit Drug Use, All Seniors	33
D.	Trends in Annual Prevalence of Illicit Drug Use by Sex	37
E.	Trends in Annual Prevalence of Fifteen Drugs by Sex	38
F.	Trends in Thirty-Day Prevalence of Daily Use of Marijuana, Alcohol, and Cigarettes by Sex	43
G.	Trends in Annual Prevalence of Illicit Drug Use by College Plans	46
H.	Trends in Annual Prevalence of Illicit Drug Use by Region of the Country	48
I.	Trends in Annual Prevalence of Illicit Drug Use by Population Density	49
J-1.	Use of Any Illicit Drug: Trends in Lifetime Prevalence for Earlier Grade Levels	56
J-2.	Use of Any Illicit Drug Other Than Marijuana: Trends in Lifetime Prevalence for Earlier Grade Levels	57
J-3.	Marijuana: Trends in Lifetime Prevalence for Earlier Grade Levels	58
J-4.	Cocaine: Trends in Lifetime Prevalence for Earlier Grade Levels	59
J-5.	Stimulants: Trends in Lifetime Prevalence for Earlier Grade Levels	60
J-6.	Hallucinogens: Trends in Lifetime Prevalence for Earlier Grade Levels	61

Figures (cont.) Page

J-7. Inhalants: Trends in Lifetime Prevalence for Earlier Grade Levels . 62

J-8. Sedatives: Trends in Lifetime Prevalence for Earlier Grade Levels 63

J-9. Barbiturates: Trends in Lifetime Prevalence for Earlier Grade Levels 64

J-10. Methaqualone: Trends in Lifetime Prevalence for Earlier Grade Levels 65

J-11. Tranquilizers: Trends in Lifetime Prevalence for Earlier Grade Levels 66

J-12. Heroin: Trends in Lifetime Prevalence for Earlier Grade Levels . . 67

J-13. Other Opiates: Trends in Lifetime Prevalence for Earlier Grade Levels 68

J-14. Cigarettes: Trends in Lifetime Prevalence for Earlier Grade Levels 69

J-15. Alcohol: Trends in Lifetime Prevalence for Earlier Grade Levels 70

K. Degree of High Attained by Recent Users 72

L. Duration of High Attained by Recent Users 73

M. Trends in Disapproval of Illicit Drug Use, Seniors, Parents, and Peers 94

N. Trends in Disapproval of Licit Drug Use, Seniors, Parents, and Peers 96

O. Proportion of Friends Using Each Drug as Estimated by Seniors, in 1980 99

P. Trends in Perceived Availability of Drugs 107

INTRODUCTION

This report presents findings from a national research and reporting program being conducted by The University of Michigan's Institute for Social Research. That program, entitled Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth, is funded primarily through a research grant from the National Institute on Drug Abuse.

The present document is the fourth in an annual series reporting the drug use and related attitudes of high school seniors in the United States. This report covers the high school classes of 1975 through 1980, and supercedes the previous report—1979 Highlights: Drugs and the Nation's High School Students, Five Year National Trends.

The larger volume, from which this document presents only the highlights of findings, is to be published by the National Institute on Drug Abuse early in 1981 under the title Student Drug Use in America: 1975-1980. That larger volume is the third in a biannual series of considerably more detailed reports, the last being Drugs and the Class of '78: Behaviors, Attitudes, and Recent National Trends.* In addition to presenting a full chapter of detailed findings for each of eleven classes of drugs, the larger volume contains chapters on attitudes and beliefs about drugs and various relevant aspects of the social milieu, as well as several appendices dealing with validity, sampling error estimation, and survey instrumentation.

Content Covered in this Report

Two of the major topics to be treated here are the current prevalence of drug use among American high school seniors, and trends in use since 1975. Also reported are data on grade of first use, trends in use at earlier grade levels, intensity of drug use, attitudes and beliefs among seniors concerning various types of drug use, and their perceptions of certain relevant aspects of the social environment.

---

*Those interested in obtaining a copy of either of these volumes free of charge may write to the National Clearinghouse for Drug Abuse Information, National Institute on Drug Abuse, 5600 Fishers Lane, Rockville, Maryland 20857.

The eleven separate classes of drugs distinguished are marijuana (including hashish), inhalants, hallucinogens, cocaine, heroin, natural and synthetic opiates other than heroin, stimulants, sedatives, tranquilizers, alcohol, and cigarettes. (This particular organization of drug use classes was chosen to heighten comparability with a parallel publication based on a national household survey on drug abuse.) Separate statistics are also presented here for several sub-classes of drugs: PCP and LSD (both hallucinogens), barbiturates and methaqualone (both sedatives) and the amyl and butyl nitrites (both inhalants). PCP and the nitrites were added to our measurement for the first time in 1979 because of increasing concern over their rising popularity and possibly deleterious effects; trend data are thus only available for them over the last one-year interval. Barbiturates and methaqualone, which in combination constitute the two components of the "sedatives" class as used here, have been separately measured from the outset. They are being presented separately for the first time this year because their trend lines are diverging substantially.

Except for the findings on alcohol and cigarettes, practically all of the information reported here deals with illicit drug use.* Respondents were asked to exclude any occasions on which they had used any of the psychotherapeutic drugs under medical supervision. (Some data on the medically supervised use of such drugs are contained in the full 1978 and 1981 volumes.)

We have chosen to focus considerable attention on drug use at the higher frequency levels rather than simply reporting proportions who have ever used various drugs. This is done to help differentiate levels of seriousness, or extent, of drug involvement. While we may yet lack any public consensus of what levels of use constitute "abuse," there is surely a consensus that heavier levels of use are more likely to have detrimental effects for the user and society than are lighter levels. We have also introduced indirect measures of dosage per occasion, by asking respondents the duration and intensity of the highs they usually experience with each type of drug.

Since the monitoring of trends in licit and illicit substance use is but one of the many objectives of this research program, we have added for the first time this year a brief synopsis of other drug-related research findings which have emerged from the study during the year. This synopsis may be found at the end of this document.

Purposes and Rationale for this Research

Perhaps no area is more clearly appropriate for the application of systematic research and reporting than the drug field, given its rapid rate of change, its importance for the well-being of the nation, and the amount of legislative and administrative intervention addressed to it.

---

*Actually, purchase and use of the butyl nitrites remains legal and unregulated at the present time.

Young people are often at the leading edge of social change; and this has been particularly true in the case of drug use. The surge in illicit drug use during the last decade has proven to be primarily a youth phenomenon, with onset of use most likely to occur during adolescence. From one year to the next particular drugs rise or fall in popularity, and related problems occur for youth, for their families, for governmental agencies, and for society as a whole. This year's findings show that considerable change is continuing to take place.

One of the major purposes of the Monitoring the Future series is to develop an accurate picture of the current situation and of current trends. A reasonably accurate assessment of the basic size and contours of the problem of illicit drug use among young Americans is an important starting place for rational public debate and policymaking. In the absence of reliable prevalence data, substantial misconceptions can develop and resources can be misallocated. In the absence of reliable data on trends, early detection and localization of emerging problems are more difficult, and assessments of the impact of major historical and policy-induced events are much more conjectural.

The Monitoring the Future study has a number of purposes other than prevalence and trend estimation—purposes which are not addressed in any detail in this volume. Among them are: gaining a better understanding of the lifestyles and value orientations associated with various patterns of drug use, and monitoring how those orientations are shifting over time; determining the immediate and more general aspects of the social environment which are associated with drug use and abuse; determining how drug use is affected by major transitions in social environment (such as entry into military service, civilian employment, college, unemployment) or in social roles (marriage, parenthood); distinguishing age effects from cohort and period effects in determining drug use; determining the effects of social legislation on all types of drug use; and determining the changing connotations of drug use and changing patterns of multiple drug use among youth. Readers interested in publications dealing with any of these other areas should write the authors at the Institute for Social Research, Rm. 2030, The University of Michigan, Ann Arbor, Michigan, 48109.

Research Design and Procedures

The basic research design involves data collections from high school seniors during the spring of each year, beginning with the class of 1975. Each data collection takes place in approximately 125 to 130 public and private high schools selected to provide an accurate cross section of high school seniors throughout the United States.

Reasons for Focusing on High School Seniors. There are several reasons for choosing the senior year of high school as an optimal point for monitoring the drug use and related attitudes of youth. First, the completion of high school represents the end of an important

developmental stage in this society, since it demarcates both the end of universal public education and, for many, the end of living in the parental home. Therefore, it is a logical point at which to take stock of the cumulated influences of these two environments on American youth. Further, the completion of high school represents the jumping-off point from which young people diverge into widely differing social environments and experiences. Finally, there are some important practical advantages to building a system of data collections around samples of high school seniors. The need for systematically repeated, large-scale samples from which to make reliable estimates of change requires that considerable stress be laid on efficiency as well as feasibility. The last year of high school constitutes the final point at which a reasonably good national sample of an age-specific cohort can be drawn and studied economically.

One limitation in the design is that it does not include in the target population those young men and women who drop out of high school before graduation—between 15 and 20 percent of each age cohort. The omission of high school dropouts does introduce biases in the estimation of certain characteristics of the entire age group; however, for most purposes, the small proportion of dropouts sets outer limits on the bias. Further, since the bias from missing dropouts should remain just about constant from year to year, their omission should introduce little or no bias into the various types of change being estimated for the majority of the population. Indeed, we believe the changes observed over time for those who finish high school are likely to parallel the changes for dropouts in most instances.

Sampling Procedures. A multi-stage procedure is used for securing a nationwide sample of high school seniors. Stage 1 is the selection of particular geographic areas, Stage 2 is the selection of one or more high schools in each area, and Stage 3 is the selection of seniors within each high school.

This three-stage sampling procedure yielded the following numbers of participating schools and students:

	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980
Number of public schools	111	108	108	111	111	107
Number of private schools	14	15	16	20	20	20
Total number of schools	125	123	124	131	131	127
Total number of students	15,791	16,678	18,436	18,924	16,662	16,524
Student response rate	78%	77%	79%	83%	82%	82%

Questionnaire Administration. About ten days before the administration students are given flyers explaining the study. The actual questionnaire administrations are conducted by the local Institute for Social Research representatives and their assistants, following standardized procedures detailed in a project instruction manual. The questionnaires are administered in classrooms during a normal class period whenever possible; however, circumstances in some schools require the use of larger group administrations.

Questionnaire Format. Because many questions are needed to cover all of the topic areas in the study, much of the questionnaire content is divided into five different questionnaire forms (which are distributed to participants in an ordered sequence that insures five virtually identical subsamples). About one-third of each questionnaire form consists of key or "core" variables which are common to all forms. All demographic variables, and nearly all of the drug use variables included in this report, are included in this "core" set of measures. Many of the questions dealing with attitudes, beliefs, and perceptions of relevant features of the social milieu are contained in only a single form, however, and are thus based on one-fifth as many cases (i.e., approximately 3,500 respondents).

Representativeness and Validity

School Participation. Schools are invited to participate in the study for a two-year period, and with only very few exceptions, each school in the original sample, after participating for one year of the study, has agreed to participate for a second year. Depending on the year, from 66% to 80% of the half-sample of schools being invited to participate in the study for the first time agree to do so; for each school refusal, a similar school (in terms of size, geographic area, urbanicity, etc.) is recruited as a replacement. The selection of replacement schools almost entirely removes problems of bias in region, urbanicity, and the like that might result from certain schools refusing to participate. Other potential biases are more subtle, however. If, for example, it turned out that most schools with "drug problems" refused to participate, that would seriously bias the sample. And if any other single factor were dominant in most refusals, that also might suggest a source of serious bias. In fact, however, the reasons for a school refusing to participate are varied and are often a function of happenstance events; only a small proportion specifically object to the drug content of the survey. Thus we feel fairly confident that school refusals have not seriously biased the surveys.

Schools are selected in such a way that half of each year's sample is comprised of schools which participated the previous year, and half is comprised of schools which will participate the following year. We make use of this staggered half-sample feature of the design to check on possible biases in the year-to-year trend estimates derived from the full samples. Specifically, five separate sets of one-year trends are

computed using first that half sample of schools which participated in both 1975 and 1976, then the half-sample which participated in both 1976 and 1977, and so on. Thus, each one-year trend estimate derived in this way is based on a set of about 65 schools. When the resulting trend data (examined separately for each class of drugs) are compared with trends based on the total sample of schools, the results are highly similar, indicating that the trend estimates are little affected by turnover or shifting refusal rates in the school samples.

Student Participation. Completed questionnaires are obtained from 77% to 83% of all sampled students in participating schools each year. The single most important reason that students are missed is absence from class at the time of data collection; in most cases it is not workable to schedule a special follow-up data collection for absent students. Students with fairly high rates of absenteeism also report above-average rates of drug use; therefore, there is some degree of bias introduced into the prevalence estimates by our missing the absentees. Much of that bias could be corrected through the use of special weighting; however, we decided not to do so because the bias in overall drug use estimates was determined to be quite small, and because the necessary weighting procedures would have introduced undesirable complications (Appendix A of the full report provides a discussion of this point). Of course, some students are not absent from class, but simply refuse when asked to complete a questionnaire. However, the proportion of explicit refusals only amounts to about 1 percent of the target sample.

Sampling Accuracy of the Estimates. For purposes of this introduction, it is sufficient to note that drug use estimates based on the total sample for 1980 have confidence intervals that average about ±1% (as shown in Table 1, confidence intervals vary from ±2.0% to smaller than ±0.3%, depending on the drug). This means that had we been able to invite all schools and all seniors in the 48 coterminous states to participate, the results from such a massive survey should be within about one percentage point of our present findings for most drugs at least 95 times out of 100. We consider this to be a high level of accuracy, and one that permits the detection of fairly small changes from one year to the next.

Consistency and the Measurement of Trends. One other point is worth noting in a discussion of the validity of our findings. The Monitoring the Future project is, by intention, a study designed to be sensitive to changes from one time to another. Accordingly, the measures and procedures have been standardized and applied consistently across each data collection. To the extent that any biases remain because of limits in school and/or student participation, and to the extent that there are distortions (lack of validity) in the responses of some students, it seems very likely that such problems will exist in much the same way from one year to the next. In other words, biases in the survey estimates will tend to be consistent from one year to another, which means that our measurement of trends should be affected very little by any such biases.

OVERVIEW OF KEY FINDINGS

The 1980 survey of high school seniors revealed a number of significant changes during the past year. Some trends continued at an accelerated pace, others abruptly stopped, and some reversed. On the whole, the news this year is more positive than in any of our previous reports. The next paragraphs note only a few of the most important headlines for 1980. The remaining sections of this Highlights volume contain many additional new findings.

- Perhaps the most dramatic change in substance use now taking place among American young people is the sharp drop in regular cigarette smoking. (Daily use dropped 4% this year to 21%.) The rate of decline appeared to accelerate this year among both males and females. We are inclined to attribute this change to a long-term increase in young people's health concerns about smoking as well as to a sharp decrease in the perceived peer acceptance of smoking.

- Another important change this year is a drop in daily marijuana use, from 10.3% to 9.1%, following a period of dramatic increase. As with cigarette smoking, this change appears attributable to a continuing increase in health concerns related to regular use of this drug, as well as to a decrease in perceived peer acceptance. The proportion of seniors attributing "great risk" to regular marijuana use has risen substantially in the last two years (from 35% to 50%) and the proportion who think their close friends would disapprove such behavior rose for the first time this year (from 66% to 72%).

- The 1980 data also reveal slight drops in annual marijuana use (down 2%) and monthly marijuana use (down 3%). While not large, these shifts represent a dramatic contrast to the rapid rise which was

occurring up until 1978. In addition, there has been a decline in the past two years in how "high" seniors get when they use marijuana, and how long they stay high.

- Use of the hallucinogenic drug PCP, about which many professionals in the drug field have expressed considerable concern, is dropping markedly this year (annual prevalence fell from 7.0% to 4.4%). Since the study contains only one year of trend data on this drug, we are unable to comment on longer-term trends.

- Inhalant use, after a continuous increase from 1975 to 1979, declined some this year—in large part due to a decline (though not a statistically significant one) in use of the amyl and butyl nitrites. (Reported friends' use of inhalants and the nitrites also declined modestly, tending to confirm the validity of the findings.)

- The prevalence of use of two drugs—cocaine and heroin—remained relatively stable this year, but that stability was itself significant. Both annual and lifetime prevalence for cocaine rose only 0.3%, while 30-day prevalence dropped 0.5%. This overall stability is of importance because in the late seventies cocaine use had been rising rapidly, and at an accelerating pace. (It may still be continuing to rise in the West and in the large cities.) We have also noted a downward shift in the length of time recent users report that they usually stay high on cocaine.

- Heroin use remained constant this year (lifetime prevalence is 1.1%), despite some increase in perceived availability. There has been, of course, considerable official concern over the impact of the increased purity and availability of heroin on the streets. It is too early, however, to conclude that these changed supply conditions will not affect this age group. We suspect, in fact, that the initial impact would be greatest on former users, most of whom are older than eighteen and many of whom would not be in school in any case.

- Not all of the news this year is positive, however. The overall proportion of seniors who used some illicit drug other than marijuana during the year continued to rise this year (from 28% to 30%). That rise is mostly attributable to an increase in stimulant use.

- Stimulants—the most prevalent of the illicitly used drugs after marijuana—continued their steady upward rise, with annual prevalence now at 21%. The increase was sharpest among females, the noncollege-bound,

and those in the North Central and Southern regions. Interestingly, the degree and duration of the highs experienced by stimulant users have been decreasing markedly, suggesting some changes in the reasons for use. (See the relevant discussion on page 75.)

- Methaqualone use also continued to increase this year (annual prevalence is up from 5.9% in 1979 to 7.2% in 1980), although there has been a sharp drop this year in the average duration of the methaqualone highs. The increase in prevalence occurred primarily among males and the college-bound. The other class of sedatives under study—barbiturates—continued its gradual decline in prevalence, and also gave some evidence this year of a decrease in the degree of high usually attained.

- Overall, drug use among high school students remains widespread. Nearly two-thirds of the age group (65%) have used an illicit drug, and nearly two out of every five (39%) have used an illicit drug other than marijuana.

PREVALENCE OF DRUG USE

This section summarizes the levels of drug use reported by the class of 1980. Data are included for lifetime use, use during the past year, use during the past month, and daily use. There is also a comparison of key subgroups in the population (based on sex, college plans, region of the country, and population density or urbanicity).

Prevalence of Drug Use in 1980: All Seniors

Lifetime, Monthly, and Annual Prevalence

- About two out of every three seniors (65%) report illicit drug use at some time in their lives. However, a substantial proportion of them have used only marijuana (28% of the sample or 41% of all illicit users).
- About four in every ten seniors (39%) report using an illicit drug other than marijuana at some time.*
- Figure A gives a ranking of the various drug classes on the basis of their lifetime prevalence figures.
- Marijuana is by far the most widely used illicit drug with 60% reporting some use in their lifetime, 49% reporting some use in the past year, and 34% use in the past month.

---

*Use of "other illicit drugs" includes any use of hallucinogens, cocaine, or heroin or any use of other opiates, stimulants, sedatives, or tranquilizers which is not under a doctor's orders.

TABLE 1

Prevalence (Percent Ever Used) of Sixteen Types of Drugs: Observed Estimates and 95% Confidence Limits (1980)

(N = 15900)

	Lower limit	Observed estimate	Upper limit
Marijuana/Hashish	58.3	60.3	62.3
Inhalants	11.0	11.9	12.9
Inhalants Adjusted[a]	*16.6*	*17.6*	*18.7*
Amyl & Butyl Nitrites[b]	9.7	11.1	12.7
Hallucinogens	12.1	13.3	14.6
Hallucinogens Adjusted[c]	*14.6*	*15.7*	*17.0*
LSD[b]	8.3	9.3	10.4
PCP[b]	8.2	9.6	11.2
Cocaine	14.5	15.7	17.0
Heroin	0.9	1.1	1.4
Other opiates[d]	9.0	9.8	10.7
Stimulants[d]	24.8	26.4	28.1
Sedatives[d]	13.7	14.9	16.2
Barbiturates[d]	10.0	11.0	12.1
Methaqualone[d]	8.5	9.5	10.6
Tranquilizers[d]	14.0	15.2	16.5
Alcohol	92.0	93.2	94.2
Cigarettes	69.3	71.0	72.6

[a]Adjusted for underreporting of amyl and butyl nitrites. See text for details.

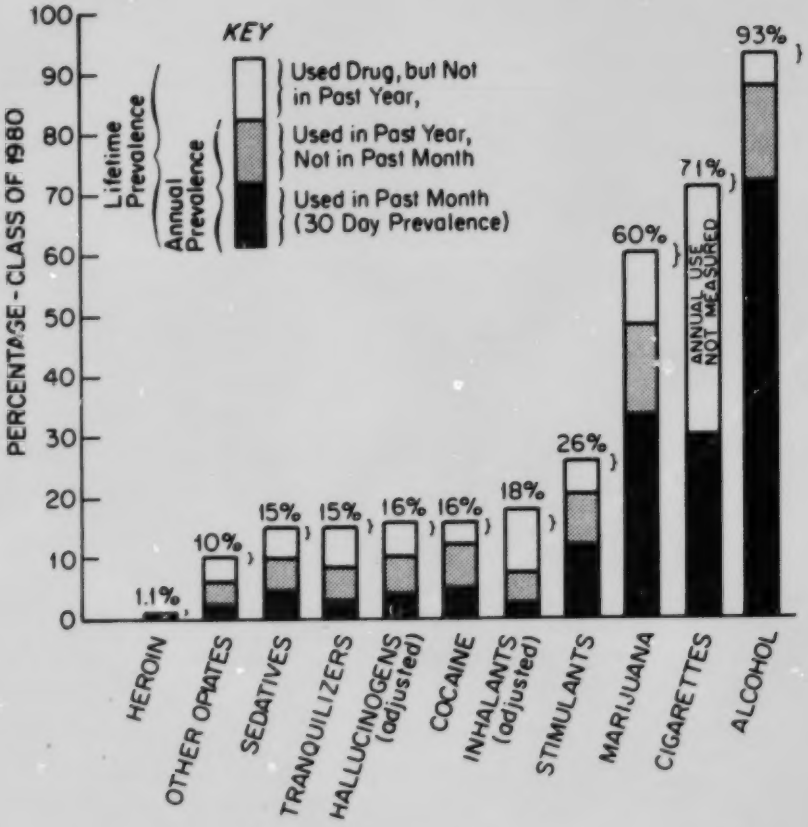
[b]Data based on a single questionnaire form. N is one-fifth of N indicated.

[c]Adjusted for underreporting of PCP. See text for details.

[d]Only drug use which was not under a doctor's orders is included here.

FIGURE A

Prevalence and Recency of Use
Eleven Types of Drugs, Class of 1980



NOTE: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

- The most widely used class of other illicit drugs is stimulants (26% lifetime prevalence).* Next come inhalants (adjusted) at 18%, cocaine at 16%, and hallucinogens (adjusted) at 16%. These are followed closely by sedatives at 15% and tranquilizers at 15%.

- The inhalant estimates have been adjusted upward because we observed that not all users of a subclass of inhalants—amyl and butyl nitrites (described below)—report themselves as inhalant users. Because we included questions specifically about nitrite use for the first time in one 1979 questionnaire form, we were able to discover this problem and make estimates of the degree to which inhalant use is being underreported in the overall estimates. As a result, the lifetime prevalence estimate for inhalants has been increased by nearly half, annual prevalence by seven-tenths, and monthly prevalence by nine-tenths. (The effect is greater for the more recent time intervals because use of the other common inhalants, such as glue and aerosols, is more likely to have been discontinued prior to senior year.)

- The specific classes of inhalants known as amyl and butyl nitrites, which are sold legally and go by the street names of "poppers" or "snappers" and such brand names as Locker Room and Rush, have been tried by one in every nine seniors (11%).

- We also discovered in 1979, by adding questions specifically about PCP use, that some users of the hallucinogenic drug PCP do not report themselves as users of hallucinogens—even though PCP is explicitly included as an example in the questions about hallucinogens. Thus, since 1979 the hallucinogen prevalence and trend estimates have been adjusted upward to correct for this known underreporting. The lifetime, annual, and monthly prevalence figures are adjusted upward by about one-fifth to one-seventh this year. This is a smaller proportional adjustment than occurred last year because there has been a decline in PCP use.**

---

*Only use which was not medically supervised is included in the figures cited in this chapter.

**Because the data to adjust inhalant and hallucinogen use are available from only a single questionnaire form in a given year, the original uncorrected variables will be used in most analyses. We believe relational analyses will be least affected by these underestimates, and that the most serious impact is on prevalence estimates, which from now on will be adjusted appropriately.

TABLE 2

Prevalence (Percent Ever Used) and Recency of Use of Sixteen Types of Drugs (1980)

(N = 15900)

	Ever used	Past month	Past year, not past month	Not past year	Never used
Marijuana/Hashish	60.3	33.7	15.1	11.5	39.7
Inhalants	11.9	1.4	3.2	7.3	88.1
Inhalants Adjusted[a]	*17.6*	*2.7*	*5.1*	*9.8*	*82.4*
Amyl & Butyl Nitrites[b]	11.1	1.8	3.9	5.4	88.9
Hallucinogens	13.3	3.7	5.6	4.0	86.7
Hallucinogens Adjusted[c]	*15.7*	*4.4*	*6.2*	*5.1*	*84.3*
LSD[b]	9.3	2.3	4.2	2.8	90.7
PCP[b]	9.6	1.4	3.0	5.2	90.4
Cocaine	15.7	5.2	7.1	3.4	84.3
Heroin	1.1	0.2	0.3	0.6	98.9
Other opiates[d]	9.8	2.4	3.9	3.5	90.2
Stimulants[d]	26.4	12.1	8.7	5.6	73.6
Sedatives[d]	14.9	4.8	5.5	4.6	85.1
Barbiturates[d]	11.0	2.9	3.9	4.2	89.0
Methaqualone[d]	9.5	3.3	3.9	2.3	90.5
Tranquilizers[d]	15.2	3.1	5.6	6.5	84.8
Alcohol	93.2	72.0	15.9	5.3	6.8
Cigarettes	71.0	30.5	(40.5)[e]		29.0

[a]Adjusted for underreporting of amyl and butyl nitrites (see text).

[b]Data based on a single questionnaire form. N is one-fifth of N indicated.

[c]Adjusted for underreporting of PCP (see text).

[d]Only drug use which was not under a doctor's orders is included here.

[e]The combined total for the two columns is shown because the question asked did not discriminate between the two answer categories.

- Lifetime prevalence for the specific hallucinogenic drug PCP now stands at 10%, a level which slightly exceeds that of the other most widely used hallucinogen, LSD (lifetime prevalence, 9%). However, because PCP is showing a higher rate of discontinuation than LSD, there is actually less current use of PCP than of LSD.

- Opiates other than heroin have been used by one in ten seniors (10%).

- Only 1.1% of the sample admitted to ever using any heroin, the most infrequently used drug. But given the highly illicit nature of this drug, we deem it to be the most likely to be underreported.

- Within the general class "sedatives," the specific drug methaqualone has now been used by nearly as many seniors (10%) as the other, much broader subclass of sedatives, barbiturates (11% lifetime prevalence).

- The illicit drug classes remain in roughly the same order when ranked by their prevalence in the most recent month and in the most recent year, as the data in Figure A illustrate. The major changes in ranking occur for inhalants and tranquilizers. This occurs because certain inhalants, like glues and aerosols, tend to be used primarily at an earlier age. Tranquilizers also tend to have a higher quitting rate than the adjacent drugs in the rank ordering.

- In fact, the drug classes with the highest rates of discontinuation of use are heroin (55% of previous users had not used in the past twelve months), inhalants (56% of users, adjusted version), the hallucinogen PCP (54%), the nitrites specifically (49%), and tranquilizers (43%).

- Use of either of the two major licit drugs, alcohol and cigarettes, remains more widespread than use of any of the illicit drugs. Nearly all students have tried alcohol (93%) and the great majority (72%) have used it in the past month.

- Some 71% report having tried cigarettes at some time, and 31% smoked at least some in the past month.

Daily Prevalence

- Frequent use of these drugs is of greatest concern from a health and safety viewpoint. Table 9 and Figure B show the prevalence of daily or near daily use of the various classes of drugs. For all drugs, except cigarettes, respondents are considered daily users if they indicate that they had used the drug on twenty or more occasions in the preceding 30 days. For cigarettes, they explicitly state use of one or more cigarettes per day.

- The displays show that cigarettes are used daily by more of the respondents (21%) than any of the other drug classes. In fact, 14% say they smoke half-a-pack or more per day.

- Another important fact is that marijuana is used on a daily or near daily basis by a substantial fraction of the age group (9.1%). By comparison, only two-thirds as many (6.0%) use alcohol that often.

- Less than 1% of the respondents report daily use of any of the illicit drugs other than marijuana. Still, 0.7% report unsupervised daily use of amphetamines, and the comparable figure for cocaine, sedatives, hallucinogens (adjusted), and inhalants (adjusted) now stands at 0.2%. While very low, these figures are not inconsequential considering that 1% of each high school class represents over 30,000 individuals.

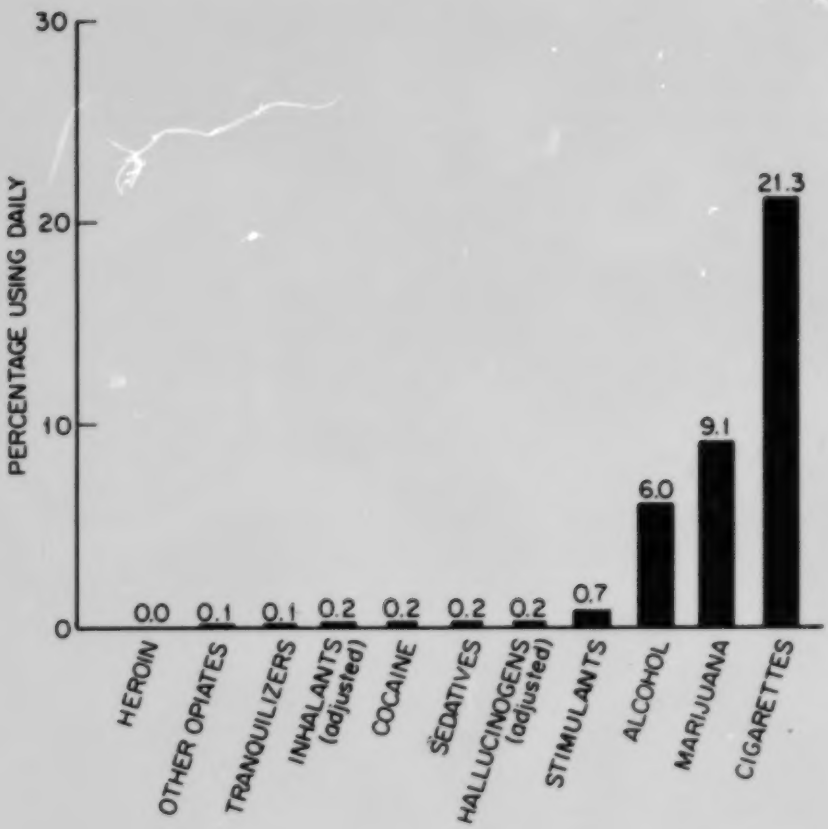
- Tranquilizers and opiates other than heroin are used daily by only about 0.1%, as are the nitrites and PCP.

- Virtually no respondents (less than 0.05%) report daily use of heroin in senior year. However, in the opinion of the investigators heroin is the drug most likely to be underreported in surveys, so this absolute prevalence figure may well be understated.

- While daily alcohol use stands at 6.0% for this age group, a substantially greater proportion report occasional heavy drinking. In fact 41% state that on at least one occasion during the prior two-week interval they had five or more drinks in a row.

FIGURE B

Thirty-Day Prevalence of Daily Use
Eleven Types of Drugs, Class of 1980



Prevalence Comparisons for Important Subgroups

Sex Differences

- In general, higher proportions of males than females are involved in drug use, especially heavy drug use; however, this picture is a complicated one (see Tables 3 through 5).

- Overall marijuana use is somewhat higher among males, and daily use of marijuana is about twice as frequent among males (11.9% vs. 6.0% for females).

- Males also have considerably higher prevalence rates on most other illicit drugs. The annual prevalence for inhalants, cocaine, hallucinogens, heroin, methaqualone, and the specific drug PCP tends to be one and one-half to two times as high among males as among females. Males also report somewhat higher rates of use than females for opiates other than heroin. Further, males account for an even greater share of the frequent or heavy users of these various classes of drugs.

- For barbiturates and tranquilizers the annual prevalence rates are nearly equal for both sexes; however, more males than females are frequent users of these classes of drugs.

- Only in the case of stimulants are the annual prevalence rates (as well as frequent usage patterns) higher among females. Annual prevalence is 22% for females vs. 20% for males.

- Despite the fact that all but one of the individual classes of illicit drugs are used more by males than by females, virtually equal proportions (30%) of both sexes report using some illicit drug other than marijuana during the last year (see Figure D). If one thinks of going beyond marijuana as an important threshold point in the sequence of illicit drug use, then equal proportions of both sexes were willing to cross that threshold at least once during the year. However, on the average the female "users" take fewer types of drugs and use them with less frequency than their male counterparts.

- Frequent use of alcohol tends to be disproportionately concentrated among males. Daily use, for example, is reported by 8.6% of the males but by only 3.5% of the females. Also, males drink large quantities of alcohol in a single sitting more often than do females.

TABLE 3

Lifetime Prevalence of Use of Sixteen Types of Drugs by Subgroups, Class of 1980

	Marijuana	Inhalants[a]	Amyl/Butyl Nitrites	Hallucinogens[a]	LSD	PCP	Cocaine	Heroin	Other Opiates	Stimulants	Sedatives	Barbiturates	Methaqualone	Tranquilizers	Alcohol	Cigarettes
All seniors	60.3	11.9	11.1	13.3	9.3	9.6	15.7	1.1	9.8	26.4	14.9	11.0	9.5	15.2	93.2	71.0
Sex:																
Male	64.4	14.2	15.3	16.1	11.3	11.6	18.4	1.3	10.8	24.7	16.4	11.8	11.4	14.9	94.5	70.0
Female	56.1	9.8	7.1	10.4	7.1	7.5	12.8	0.9	8.7	27.7	13.1	10.1	7.5	15.5	92.0	71.7
College Plans:																
None or <4 yrs	64.3	13.9	14.2	16.1	11.7	12.0	17.6	1.5	11.8	32.7	18.8	14.4	11.7	18.8	93.5	77.1
Complete 4 yrs	56.8	10.5	9.0	10.4	6.9	7.6	13.2	0.7	8.0	21.1	11.4	8.0	7.3	12.4	93.1	65.6
Region:																
Northeast	67.4	15.2	14.2	17.4	10.3	14.1	17.9	1.2	9.0	27.4	15.3	11.7	10.0	14.3	96.4	71.7
North Central	60.2	11.2	10.6	14.6	11.1	8.2	14.0	1.3	11.7	27.9	14.2	11.2	8.2	14.6	95.0	73.6
South	53.6	10.3	11.3	8.7	6.5	9.4	10.9	1.1	7.8	23.2	16.2	11.3	11.4	16.5	89.9	71.6
West	62.9	11.5	8.0	14.0	10.0	7.0	24.6	0.7	11.1	28.1	13.4	9.3	8.0	15.2	91.4	64.2
Population Density:																
Large SMSA	67.9	13.2	12.3	17.3	11.2	14.4	22.5	0.8	10.8	27.6	16.2	11.5	11.2	15.0	96.1	71.8
Other SMSA	61.0	11.9	11.6	13.9	9.7	9.1	15.0	1.2	10.4	26.4	14.6	10.7	9.3	16.4	92.7	69.6
Non-SMSA	53.9	11.0	9.7	9.6	7.5	6.8	11.6	1.2	8.3	25.4	14.4	11.1	8.6	13.8	91.5	72.2

[a]Unadjusted for known underreporting of certain drugs. See page 14.

- Finally, for cigarettes, there is a modest sex difference in the prevalence of smoking a half-a-pack or more daily, this time with females showing the higher proportion of users. Of the females, 14.7% smoke this heavily versus 13.5% of the males. There is a larger difference in proportions reporting any use during the past month: 33% of the females versus 27% of the males.

Differences Related to College Plans

- Overall, seniors who are expecting to complete four years of college (referred to here as the "college-bound") have lower rates of illicit drug use than those not expecting to do so (see Tables 3 through 5).

- Annual marijuana use is reported by 46% of the college-bound vs. 52% of the noncollege-bound.

- There is a substantial difference in the proportion of these two groups using any illicit drug(s) other than marijuana. In 1980 only 26% of the college-bound reported any such behavior in the prior year vs. 36% of the noncollege-bound.

- For each of the specific illicit drugs other than marijuana, annual prevalence is substantially higher among the noncollege-bound, as Table 4 illustrates.

- Frequent use of each of the illicit drugs is even more disproportionately concentrated among students not planning four years of college. Daily marijuana use, for example, is twice as high for this group (12%) vs. the college-bound (6%).

- Frequent alcohol use is also more prevalent among the noncollege-bound. For example, drinking on a daily basis is nearly twice as common at 8.0% vs. 4.4% for the college-bound. On the other hand, there are practically no differences between the groups in lifetime, annual, or monthly prevalence.

- By far the largest difference in substance use between the college and noncollege-bound, relates to cigarette smoking. There is a dramatic difference here, with only 8% of the college-bound smoking a half-a-pack or more daily compared with 21% of the noncollege-bound.

TABLE 4

Annual Prevalence of Use of Sixteen Types of Drugs by Subgroups, Class of 1980

	Marijuana	Inhalants [a]	Amyl/Butyl Nitrites	Hallucinogens [a]	LSD	PCP	Cocaine	Heroin	Other Opiates	Stimulants	Sedatives	Barbiturates	Methaqualone	Tranquilizers	Alcohol	Cigarettes [b]
All seniors	48.8	4.6	5.7	9.3	6.5	4.4	12.3	0.5	6.3	20.8	10.3	6.8	7.2	8.7	87.9	14.3
Sex:																
Male	53.4	5.9	7.5	11.7	8.1	5.6	14.8	0.6	7.1	19.7	11.7	7.3	8.8	9.0	89.6	13.5
Female	44.1	3.5	3.9	6.7	4.8	3.2	9.8	0.4	5.4	21.8	8.6	6.0	5.4	8.5	86.2	14.7
College Plans:																
None or <4 yrs	51.7	5.0	7.4	11.2	8.2	5.5	13.2	0.6	7.4	25.8	13.2	9.0	8.9	10.7	88.2	21.2
Complete 4 yrs	45.9	4.3	4.6	7.1	4.7	3.6	10.8	0.3	5.1	16.5	7.7	4.8	5.5	7.2	87.7	8.2
Region:																
Northeast	55.5	6.0	7.5	12.2	6.8	6.7	14.2	0.5	5.7	22.0	10.0	6.9	7.1	8.6	93.1	17.0
North Central	48.9	4.6	4.5	11.3	8.5	4.3	10.9	0.7	7.6	22.2	9.8	7.3	6.1	8.2	90.3	15.4
South	42.0	3.4	6.6	5.4	4.3	4.0	7.8	0.3	5.0	17.7	11.9	7.0	9.2	9.5	82.2	14.5
West	51.7	4.9	4.1	9.2	6.5	2.3	20.6	0.4	6.8	22.1	8.7	5.2	5.4	8.6	86.2	8.3
Population Density:																
Large SMSA	56.3	5.7	5.8	11.6	7.3	5.8	18.7	0.3	6.9	21.9	10.6	6.6	7.9	8.7	92.3	14.8
Other SMSA	49.8	4.2	5.9	9.8	6.8	4.0	11.3	0.5	7.0	20.8	10.3	6.5	7.3	9.3	87.2	13.8
Non-SMSA	41.9	4.4	5.4	7.1	5.6	3.9	8.9	0.6	4.8	19.9	10.2	7.2	6.5	8.0	85.4	14.7

[a] Unadjusted for known underreporting of certain drugs. See page 14.

[b] Based on 30-day prevalence of a half pack a day of cigarettes, or more. Annual prevalence is not available.

Regional Differences

- In general, there are not very great regional differences in 1980 in rates of illicit drug use among high school seniors. The highest rate is in the Northeast, where 59% say they have used a drug illicitly in the past year, followed by the West with 56%, and the North Central with 53%. The South is somewhat lower than the other regions with only 47% having used any illicit drug (see Tables 3 through 5).

- There is even less regional variation in terms of the percent using some illicit drug other than marijuana in the past year: 35% in the West, 32% in the Northeast, 31% in the North Central, and 26% in the South. (The West comes out highest due to its unusual level of cocaine use.)

- As Table 4 illustrates, the Northeast shows the highest annual rate of use for many of the individual illicit substances—these include marijuana, inhalants, the nitrites specifically, hallucinogens, PCP specifically, alcohol, and cigarettes. The West shows by far the highest level of cocaine use, yet it has the lowest prevalence of PCP use and nitrite use, and one of the lowest rates of heroin use. The South shows the lowest usage levels for marijuana, hallucinogens, inhalants, cocaine, other opiates, and stimulants (all replications of last year's findings).*

- Alcohol use tends to be somewhat lower in the South and West than it is in the Northeast and North Central.

- Again, one of the largest differences occurs for regular cigarette smoking. Smoking half-a-pack or more a day occurs most often in the Northeast (17% of seniors), followed closely by the North Central and South regions, with the West distinctly lower (8%). This pattern of regional differences has been replicated consistently since 1975.

---

*The replicability of these findings (as well as those presented below for urbanicity) is mentioned here because findings related to region and urbanicity are more subject to sampling error than are findings related to sex, college plans, or other subgroup divisions which cut across all schools in the sample.

TABLE 5

Thirty-Day Prevalence of Use of Sixteen Types of Drugs by Subgroups, Class of 1980

	Marijuana	Inhalants[a]	Amyl/Butyl Nitrites	Hallucinogens[a]	LSD	PCP	Cocaine	Heroin	Other Opiates	Stimulants	Sedatives	Barbiturates	Methaqualone	Tranquilizers	Alcohol	Cigarettes
All seniors	33.7	1.4	1.8	3.7	2.3	1.4	5.2	0.2	2.4	12.1	4.8	2.9	3.3	3.1	72.0	30.5
Sex:																
Male	37.8	1.8	2.4	4.8	2.9	2.2	6.0	0.3	2.9	10.9	5.6	3.2	4.2	3.3	77.4	26.8
Female	29.1	1.0	1.0	2.5	1.6	0.7	4.3	0.1	1.9	13.0	3.7	2.4	2.3	2.9	68.8	33.4
College Plans:																
None or <4 yrs	37.7	1.5	2.5	4.4	2.9	1.7	5.9	0.3	2.9	16.0	6.2	3.9	4.1	4.2	73.5	39.6
Complete 4 yrs	29.4	1.3	1.3	2.7	1.6	1.2	4.2	0.1	1.9	8.7	3.3	1.8	2.4	2.2	70.8	22.3
Region:																
Northeast	39.3	1.4	2.4	4.8	2.3	2.9	5.4	0.2	1.8	12.1	4.2	2.6	2.9	2.8	79.4	34.1
North Central	34.0	1.7	1.0	5.0	3.2	1.1	4.4	0.4	3.3	14.1	4.8	3.2	3.2	3.0	75.1	31.5
South	28.4	1.3	2.5	2.1	1.6	1.1	3.2	0.1	2.0	10.3	6.3	3.5	4.7	4.0	65.5	31.8
West	35.2	0.9	1.1	3.0	1.8	0.8	10.2	0.2	2.2	11.5	2.8	1.7	1.5	2.3	67.6	21.2
Population Density:																
Large SMSA	39.6	1.4	1.2	4.3	2.5	1.9	7.6	0.3	2.4	12.6	4.1	2.4	3.0	2.6	78.0	31.2
Other SMSA	34.5	1.1	1.7	4.2	2.4	1.4	4.7	0.2	2.7	11.9	5.0	3.0	3.4	3.3	70.8	29.7
Non-SMSA	28.3	1.6	2.3	2.7	2.0	1.2	4.2	0.2	2.0	11.9	5.0	3.1	3.4	3.3	69.0	30.9

[a]Unadjusted for known underreporting of certain drugs. See page 14.

Differences Related to Population Density

- Three levels of population density (or urbanicity) have been distinguished for analytical purposes: (1) Large SMSA's, which are the twelve largest Standard Metropolitan Statistical Areas in the 1970 Census; (2) Other SMSA's, which are the remaining Standard Metropolitan Statistical Areas; and (3) Non-SMSA's, which are sampling areas not designated as metropolitan.

- Overall illicit drug use is highest in the largest metropolitan areas (60% annual prevalence), slightly lower in the other metropolitan areas (54%), and lowest in the nonmetropolitan areas (47%).

- The same ranking occurs for the use of illicit drugs other than marijuana: 35% annual prevalence in the largest cities, 30% in the other cities, and 28% in the nonmetropolitan areas.

- For specific drugs, the largest absolute difference associated with urbanicity occurs for marijuana, which has an annual prevalence of 56% in the large cities but only 42% in the nonmetropolitan areas (Table 4).

- Usage rates for cocaine in particular, as well as for hallucinogens, PCP specifically, and opiates other than heroin, also are positively correlated with urbanicity, as is the use of alcohol. (All of these findings replicate last year's results.)

- Prevalence rates for the following drugs show little or no association with urbanicity: inhalants, the nitrites specifically, tranquilizers, cigarettes, stimulants, or sedatives. (The last two drug classes did show a modest correlation with urbanicity in 1979. Otherwise, these findings represent replications.)

RECENT TRENDS

This section summarizes trends in drug use, comparing the six graduating classes of 1975 through 1980. As in the previous section, the outcomes discussed include measures of lifetime use, use during the past year, use during the past month, and daily use. Also, trends are compared among the key subgroups.

Trends in Prevalence 1975-1980: All Seniors

- It now appears that 1978 and 1979 may have marked the crest of a long and dramatic rise in marijuana use among American high school students. As Tables 6 through 9 illustrate, annual and 30-day prevalence of marijuana use hardly changed at all between 1978 and 1979, following a steady rise in the preceding years; and in 1980 both statistics dropped for the first time. (Lifetime prevalence remained unchanged in 1980.) As we disuss later, there have been some significant changes in the attitudes and beliefs these young people hold in relation to marijuana; these changes lend further credibility to the prevalence results, and also suggest that the downward shift in marijuana use may continue.

- Between 1975 and 1978 there was an almost two-fold increase in daily marijuana use. The proportion reporting daily use in the class of 1975 (6.0%) came as a surprise to many. That proportion then rose rapidly, so that by 1978 one in every nine high school seniors (10.7%) indicated that he or she used the drug on a daily or nearly daily basis (defined as use on 20 or more occasions in the last 30 days). Last year we reported that this rapid and troublesome increase had come to a halt, with 10.3% of the 1979 seniors reporting use at a daily level. This year daily use for the first time dropped, by 1.2% (a statistically significant amount), and is now back to 9.1%. As later sections of this report document, much of this reversal

TABLE 6

Trends in Lifetime Prevalence of Sixteen Types of Drugs

	Percent ever used						
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	'79-'80 change
Approx. N =	(9400)	(15400)	(17100)	(17800)	(15500)	(15900)	
Marijuana/Hashish	47.3	52.6	56.4	59.2	60.4	60.3	-0.1
Inhalants	NA	10.3	11.1	12.0	12.7	11.9	-0.8
Inhalants Adjusted[a]	NA	NA	NA	NA	*18.7*	*17.6*	*-1.1*
Amyl & Butyl Nitrites[b]	NA	NA	NA	NA	11.1	11.1	0.0
Hallucinogens	16.3	15.1	13.9	14.3	14.1	13.3	-0.8
Hallucinogens Adjusted[c]	NA	NA	NA	NA	*18.6*	*15.7*	*-2.9 sss*
LSD	11.3	11.0	9.8	9.7	9.5	9.3	-0.2
PCP[b]	NA	NA	NA	NA	12.8	9.6	-3.2 ss
Cocaine	9.0	9.7	10.8	12.9	15.4	15.7	+0.3
Heroin	2.2	1.8	1.8	1.6	1.1	1.1	0.0
Other opiates[d]	9.0	9.6	10.3	9.9	10.1	9.8	-0.3
Stimulants[d]	22.3	22.6	23.0	22.9	24.2	26.4	+2.2 s
Sedatives[d]	18.2	17.7	17.4	16.0	14.6	14.9	+0.3
Barbiturates[d]	16.9	16.2	15.6	13.7	11.8	11.0	-0.8
Methaqualone[d]	8.1	7.8	8.5	7.9	8.3	9.5	+1.2 ss
Tranquilizers[d]	17.0	16.8	18.0	17.0	16.3	15.2	-1.1
Alcohol	90.4	91.9	92.5	93.1	93.0	93.2	+0.2
Cigarettes	73.6	75.4	75.7	75.3	74.0	71.0	-3.0 ss

NOTES: Level of significance of difference between the two most recent classes: *s* = .05, *ss* = .01, *sss* = .001.

NA indicates data not available.

[a]Adjusted for underreporting of amyl and butyl nitrites (see text).

[b]Data based on a single questionnaire form. N is one-fifth of N indicated.

[c]Adjusted for underreporting of PCP (see text).

[d]Only drug use which was not under a doctor's orders is included here.

TABLE 7

Trends in Annual Prevalence of Sixteen Types of Drugs

	Percent who used in last twelve months						
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	'79-'80 change
Approx. N =	(9400)	(15400)	(17100)	(17800)	(15500)	(15900)	
Marijuana/Hashish	40.0	44.5	47.6	50.2	50.8	48.8	-2.0
Inhalants	NA	3.0	3.7	4.1	5.4	4.6	-0.8 s
Inhalants Adjusted[a]	NA	NA	NA	NA	9.2	7.8	-1.4 ss
Amyl & Butyl Nitrites[b]	NA	NA	NA	NA	6.5	5.7	-0.8
Hallucinogens	11.2	9.4	8.8	9.6	9.9	9.3	-0.6
Hallucinogens Adjusted[c]	NA	NA	NA	NA	12.8	10.6	-2.2 sss
LSD	7.2	6.4	5.5	6.3	6.6	6.5	-0.1
PCP[b]	NA	NA	NA	NA	7.0	4.4	-2.6 sss
Cocaine	5.6	6.0	7.2	9.0	12.0	12.3	+0.3
Heroin	1.0	0.8	0.8	0.8	0.5	0.5	0.0
Other opiates[d]	5.7	5.7	6.4	6.0	6.2	6.3	+0.1
Stimulants[d]	16.2	15.8	16.3	17.1	18.3	20.8	+2.5 ss
Sedatives[d]	11.7	10.7	10.8	9.9	9.9	10.3	+0.4
Barbiturates[d]	10.7	9.6	9.3	8.1	7.5	6.8	-0.7
Methaqualone[d]	5.1	4.7	5.2	4.9	5.9	7.2	+1.3 sss
Tranquilizers[d]	10.6	10.3	10.8	9.9	9.6	8.7	-0.9
Alcohol	84.8	85.7	87.0	87.7	88.1	87.9	-0.2
Cigarettes	NA	NA	NA	NA	NA	NA	NA

NOTES: Level of significance of difference between the two most recent classes: *s* = .05, *ss* = .01, *sss* = .001.

NA indicates data not available.

[a]Adjusted for underreporting of amyl and butyl nitrites (see text).

[b]Data based on a single questionnaire form. N is one-fifth of N indicated.

[c]Adjusted for underreporting of PCP (see text).

[d]Only drug use which was not under a doctor's orders is included here.

TABLE 8

Trends in Thirty-Day Prevalence of Sixteen Types of Drugs

	Percent who used in last thirty days						
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	'79-'80 change
Approx. N =	(9400)	(15400)	(17100)	(17800)	(15500)	(15900)	
Marijuana/Hashish	27.1	32.2	35.4	37.1	36.5	33.7	-2.8 s
Inhalants	NA	0.9	1.3	1.5	1.7	1.4	-0.3
Inhalants Adjusted[a]	NA	NA	NA	NA	*3.1*	*2.7*	*-0.4*
Amyl & Butyl Nitrites[b]	NA	NA	NA	NA	2.4	1.8	-0.6
Hallucinogens	4.7	3.4	4.1	3.9	4.0	3.7	-0.3
Hallucinogens Adjusted[c]	NA	NA	NA	NA	*5.5*	*4.4*	*-1.1 ss*
LSD	2.3	1.9	2.1	2.1	2.4	2.3	-0.1
PCP[b]	NA	NA	NA	NA	2.4	1.4	-1.0 s
Cocaine	1.9	2.0	2.9	3.9	5.7	5.2	-0.5
Heroin	0.4	0.2	0.3	0.3	0.2	0.2	0.0
Other Opiates[d]	2.1	2.0	2.8	2.1	2.4	2.4	0.0
Stimulants[d]	8.5	7.7	8.8	8.7	9.9	12.1	+2.2 sss
Sedatives[d]	5.4	4.5	5.1	4.2	4.4	4.8	+0.4
Barbiturates[d]	4.7	3.9	4.3	3.2	3.2	2.9	-0.3
Methaqualone[d]	2.1	1.6	2.3	1.9	2.3	3.3	+1.0 sss
Tranquilizers[d]	4.1	4.0	4.6	3.4	3.7	3.1	-0.6 s
Alcohol	68.2	68.3	71.2	72.1	71.6	72.0	+0.2
Cigarettes	36.7	38.8	38.4	36.7	34.4	30.5	-3.9 sss

NOTES: Level of significance of difference between the two most recent classes:
s = .05, *ss* = .01, *sss* = .001.

NA indicates data not available.

[a]Adjusted for underreporting of amyl and butyl nitrites (see text).

[b]Data based on a single questionnaire form. N is one-fifth of N indicated.

[c]Adjusted for underreporting of PCP (see text).

[d]Only drug use which was not under a doctor's orders is included here.

TABLE 9

Trends in Thirty-Day Prevalence of Daily Use of Sixteen Types of Drugs

	Percent who used daily in last thirty days						
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	'79-'80 change
Approx. N =	(9400)	(15400)	(17100)	(17800)	(15500)	(15900)	
Marijuana/Hashish	6.0	8.2	9.1	10.7	10.3	9.1	-1.2 ss
Inhalants	NA	0.0	0.0	0.1	0.0	0.1	+0.1
Inhalants Adjusted[a]	NA	NA	NA	NA	*0.1*	*0.2*	+0.1
Amyl & Butyl Nitrites[b]	NA	NA	NA	NA	0.0	0.1	+0.1
Hallucinogens	0.1	0.1	0.1	0.1	0.1	0.1	*0.0*
Hallucinogens Adjusted[c]	NA	NA	NA	NA	*0.2*	*0.2*	*0.0*
LSD	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*
PCP[b]	NA	NA	NA	NA	0.1	0.1	*0.0*
Cocaine	0.1	0.1	0.1	0.1	0.2	0.2	*0.0*
Heroin	0.1	0.0	0.0	0.0	0.0	0.0	*0.0*
Other opiates[d]	0.1	0.1	0.2	0.1	0.0	0.1	+0.1
Stimulants[d]	0.5	0.4	0.5	0.5	0.6	0.7	+0.1
Sedatives[d]	0.3	0.2	0.2	0.2	0.1	0.2	+0.1
Barbiturates[d]	0.1	0.1	0.2	0.1	0.0	0.1	+0.1
Methaqualone[d]	0.0	0.0	0.0	0.0	0.0	0.1	+0.1
Tranquilizers[d]	0.1	0.2	0.3	0.1	0.1	0.1	*0.0*
Alcohol	5.7	5.6	6.1	5.7	6.9	6.0	-0.9 s
Cigarettes	26.9	28.8	28.8	27.5	25.4	21.3	-4.1 ss

NOTES: Level of significance of difference between the two most recent classes:
s = .05, ss = .01, sss = .001.

NA indicates data not available.

[a]Adjusted for underreporting of amyl and butyl nitrites (see text).

[b]Data based on a single questionnaire form. N is one-fifth of N indicated.

[c]Adjusted for underreporting of PCP (see text).

[d]Only drug use which was not under a doctor's orders is included here.

appears to be due to increasing concerns about possible adverse effects from regular use, as well as to the perception that peers are now more disapproving of regular marijuana use.

- Until 1978, the proportion of seniors involved in illicit drug use had increased primarily because of the increase in marijuana use. About 54% of the class of 1978 reported having tried at least one illicit drug during the last year, compared with 45% of the class of 1975. Between 1979 and 1980, however, the proportion using any illicit drug during the year dropped by 1%, again due primarily to the change in marijuana use.

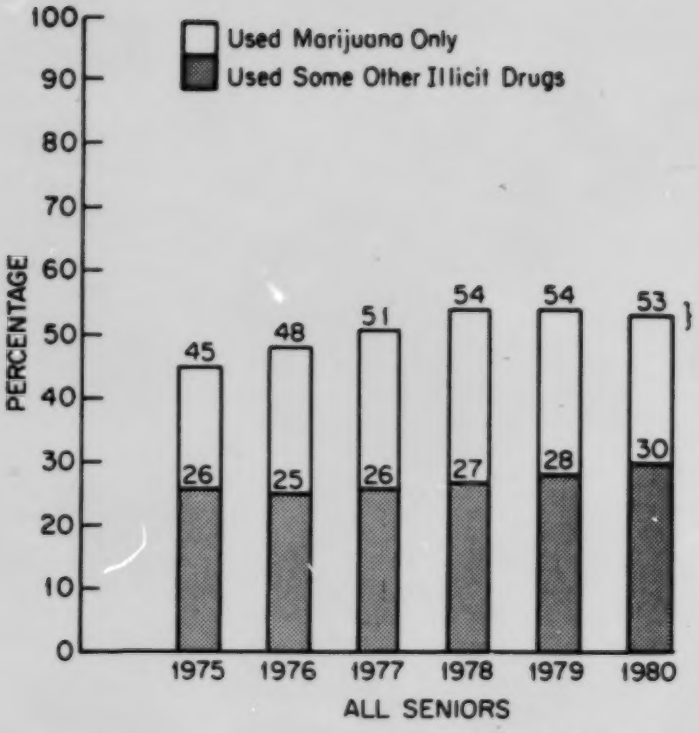
- But, since 1976 there has been a very gradual, steady increase in the proportion who use some illicit drug other than marijuana—an increase which continued this year. The proportion going beyond marijuana in their lifetime has risen from 35% to 39% between 1976 and 1980, and the annual prevalence of such behaviors has risen from 25% to 30% (see Figure C). Most of this rise appears due to the increasing popularity of cocaine with this age group between 1976 and 1979 and the increasing use of stimulants this year.

- Although the overall proportion using illicit drugs other than marijuana has changed very gradually over the last four years, more varied and turbulent changes have been occurring for specific drugs within the class. (See Tables 6, 7, and 8 for recent trends in lifetime, annual, and monthly prevalence figures for each class of drugs.)

- From 1975 to 1979 cocaine exhibited a dramatic and accelerating increase in popularity, with annual prevalence going from 5.6% in the class of 1975 to 12% in the class of 1979—a two-fold increase in just four years. This year, however, this rise abruptly stopped, with lifetime and annual prevalence rising only .3% and 30-day prevalence actually dropping .5%. (While an analysis of the matched half-sample of schools who participated in both 1979 and 1980 shows a slightly greater increase in lifetime and annual prevalence this year than these figures indicate, it also shows a stabilization of 30-day prevalence.) The proportion using cocaine ten or more times in the prior month rose from 0.0% in 1975 to 0.5% in 1979, while daily or near-daily use rose from 0.0% to 0.2% over the same period. These numbers remained virtually unchanged in 1980.

FIGURE C

Trends in Annual Prevalence of Illicit Drug Use
All Seniors



NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

- Like cocaine use, inhalant use had been rising steadily, though more slowly and from a lower overall level. Annual prevalence rose from 3.0% in 1976 to 5.4% in 1979. This year, however, usage appears to have leveled, and perhaps even declined. This is in part due to a small observed (though not statistically significant) decline in the use of the amyl and butyl nitrites.

- Stimulant use, which had remained relatively unchanged between 1975 and 1978, began to show evidence of a gradual increase in use in 1979. A further increase occurred this year, which means that since 1977 annual prevalence has risen by 4.5% (from 16.3% in 1977 to 20.8% in 1980). Daily use has also risen steadily from 0.4% in 1976 to 0.7% in 1980. (The possible reasons for this shift are discussed in a later section on the degree and duration of highs experienced.)

- For sedatives the sustained, gradual decline between 1975 and 1979 appears to have halted, and perhaps even to have been reversed. Lifetime prevalence dropped steadily from 18.2% in 1975 to 14.6% in 1979, and then increased very slightly to 14.9% in 1980.

- Unlike sedatives, tranquilizers did continue their previous steady decline again this year—a decline which began in 1977. Lifetime prevalence has been dropping about 1% a year, from 18% in 1977 to 15% in 1980.

- Between 1975 and 1979 the prevalence of heroin use had been dropping rather steadily. Lifetime prevalence dropped from 2.2% in 1975 to 1.1% in 1979 and annual prevalence has also dropped by half, from 1.0% in 1975 to 0.5% in 1979. This decline halted this year. But the fact of greatest significance is that use did not increase, considering the greater availability and purity of heroin reported to be entering the United States as a result of instability in the Middle East.* As the data on availability (presented below) will show, the perceived availability of heroin to this age group has risen modestly over the past two years. However, a rather convincing argument can be made that the

---

*Since the impact to date is alleged to be greatest in the Northeastern cities, we examined heroin statistics for the Northeast specifically (see the full 1980 volume for these details) and found no increase there either.

major initial impact on usage patterns of a surge in availability will be on former users, who are located primarily in older age groups; and that the impact on younger age groups will be more delayed. Thus we will be looking carefully at heroin trends in 1981.

- The use of opiates other than heroin continues to remain quite stable, with annual prevalence at or near 6% every year since 1975.

- Hallucinogen use (unadjusted for underreporting of PCP) declined in the middle of the decade (from 11.2% in 1975 to 9.6% in 1978 on annual prevalence), but this decline halted in 1979. There is rather little change again this year. The slight 1979-1980 decreases in the prevalence figures should not be overinterpreted, since the matched half-sample of schools actually shows a slight increase in 1980.

- LSD, one of the major drugs comprising the hallucinogen class, has exhibited a pattern of change which is very similar to that of the class as a whole: that is, there was a decline from 1975 to 1977 or 1978, but considerable stability since then.

- Hallucinogens other than LSD (taken as a class), however, have continued to decline slowly over the last two years. Annual prevalence dropped from 7.3% in 1978 to 6.2% in 1980, having previously dropped from 9.4% in 1975. This is undoubtedly due in part, at least this year, to a decline in PCP use (even though not all PCP users report themselves as using "hallucinogens other than LSD," as they should).

- The specific hallucinogen PCP showed sizeable (as well as statistically significant) decrease this year. Annual prevalence, for example, dropped from 7.0% to 4.4%—nearly a 40% reduction in the absolute number of users. Because of this, when overall hallucinogen use is adjusted for known underreporting of PCP, a significant decline is observed this year in the adjusted figures for hallucinogens taken as a class.

- As can be seen from these varied patterns for the various drug classes, while the overall proportion of seniors using any illicit drugs other than marijuana has not changed a great deal, the mix of drugs they are using obviously has been changing.

- Turning to the licit drugs, between 1975 and 1978 there has been a very gradual but steady upward shift in the prevalence of alcohol use (except for daily use) among seniors. To illustrate, the annual prevalence

rate rose steadily from 85% in 1975 to 88% in 1978. Since 1978, however, the alcohol prevalence figures have remained virtually constant.

- The rate of daily alcohol use, which since 1976 has been exceeded by the daily marijuana use rate in this age group, has remained quite steady at about 6% since our first survey in 1975. However, there had been some increase in the frequency of binge drinking over that same interval. When asked whether they had taken five or more drinks in a row during the prior two weeks, 37% of the seniors in 1975 said they had. This proportion rose gradually to 41% by 1979. This year, however, the increase has stopped, and the figure remains at 41%.

- As for cigarette use, 1976 and 1977 appear to have been the peak years for lifetime, thirty-day, and daily prevalence. (Annual prevalence is not asked.) Over the last three graduating classes, thirty-day prevalence has been dropping, from 38% in the class of 1977 to 31% in the class of 1980. More importantly, daily cigarette use has dropped over that same interval from 29% to 21% (more than a one-fourth decrease in the number of daily users), and daily use of half-pack-a-day or more has fallen from 19.4% to 14.3% between 1977 and 1980 (also a one-fourth decrease). Further, the decline appears to be accelerating, with daily use dropping 4.1% over just the last year. As with daily marijuana use, it appears that these important shifts in daily smoking rates are in response to both rising personal concerns about the health consequences of use, and a perceived hardening of peer norms in relation to the regular use of these drugs. (See the relevant sections below.) Needless to say, these changes are highly significant from both a substantive and statistical point of view.

Trend Comparisons for Important Subgroups

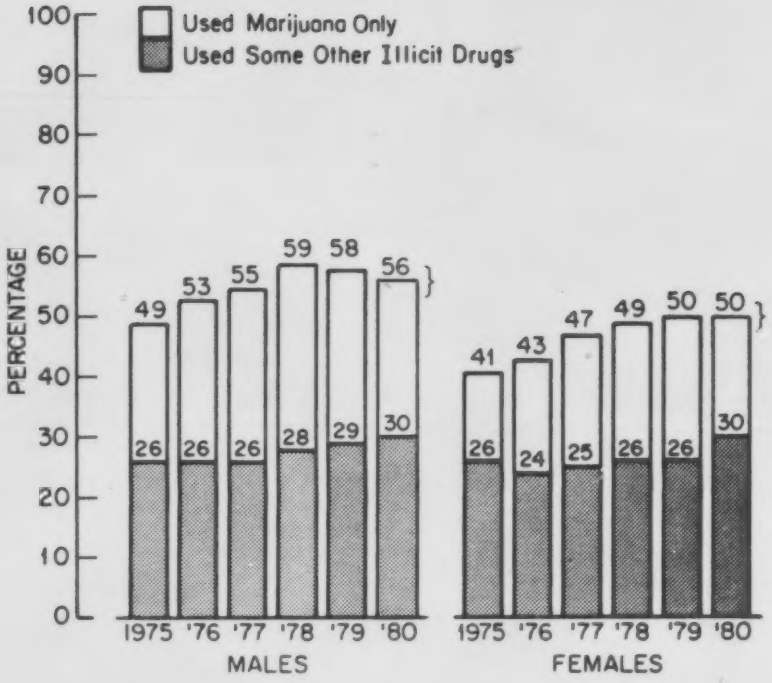
Sex Differences in Trends

- Most of the sex differences mentioned earlier for individual classes of drugs have remained relatively unchanged over the past five years—that is, any trends in overall use have occurred about equally among males and females, as the trend lines in Figures D and E illustrate. There are however, a few exceptions.

- The continuing increase in stimulant (amphetamine) use this year was particularly sharp among females, for whom annual prevalence rose from 18% to 22%. While stimulant use had been about equal for the two

FIGURE D

Trends in Annual Prevalence of Illicit Drug Use
by Sex



NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

FIGURE E

Trends in Annual Prevalence of Fifteen Drugs by Sex

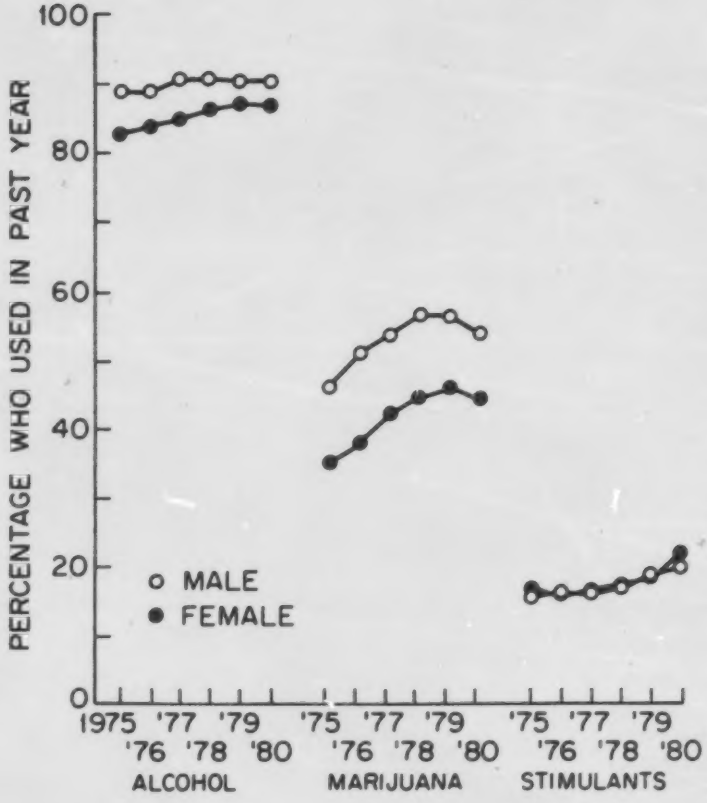


FIGURE E (cont.)

Trends in Annual Prevalence of Fifteen Drugs
by Sex

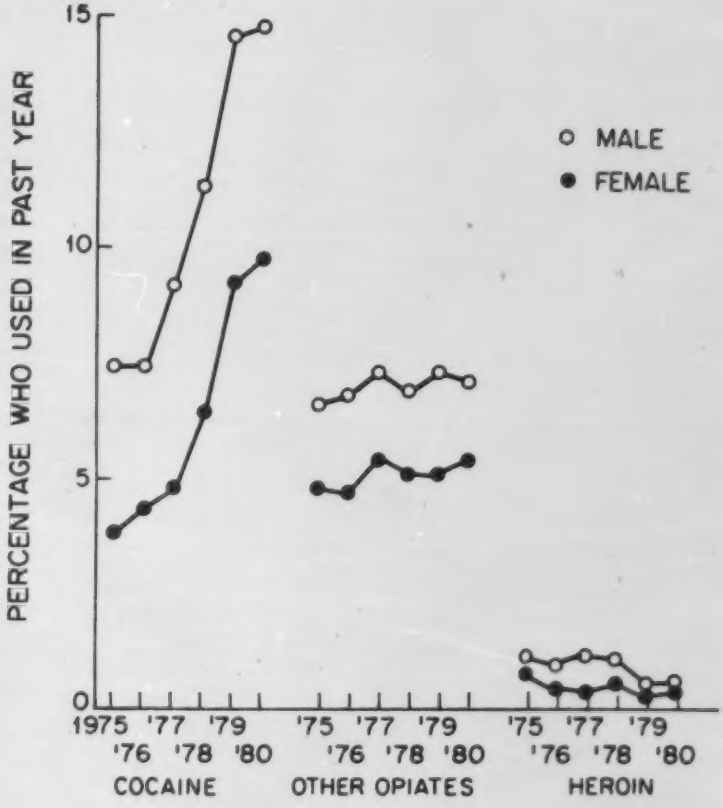


FIGURE E (cont.)

Trends in Annual Prevalence of Fifteen Drugs
by Sex

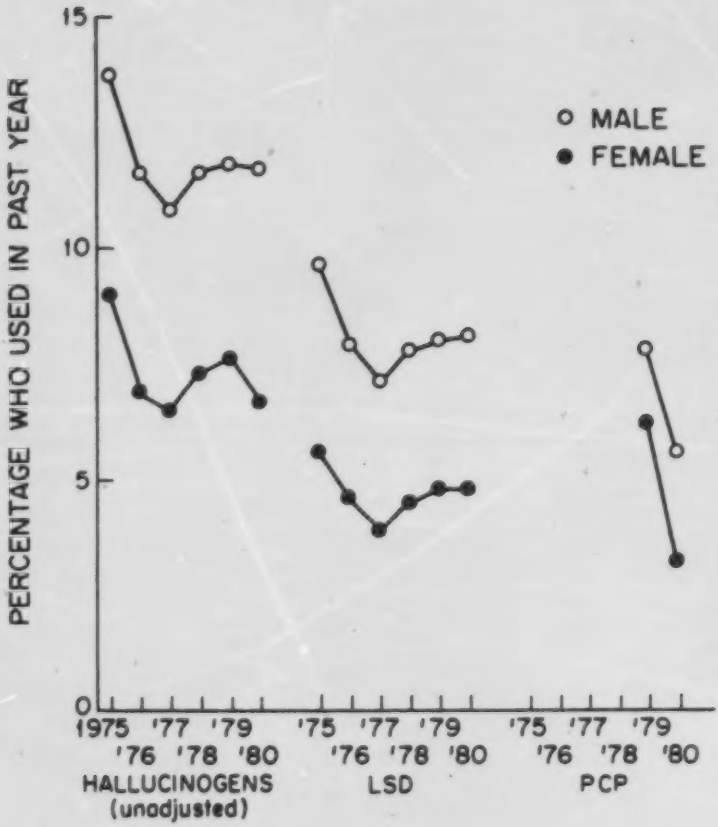


FIGURE E (cont.)

Trends in Annual Prevalence of Fifteen Drugs by Sex

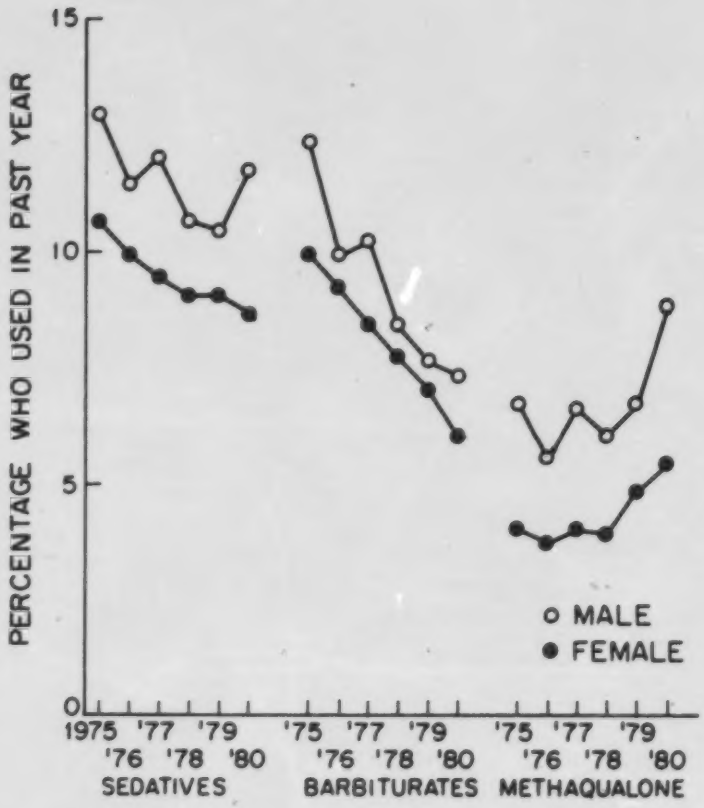


FIGURE E (cont.)

Trends in Annual Prevalence of Fifteen Drugs
by Sex

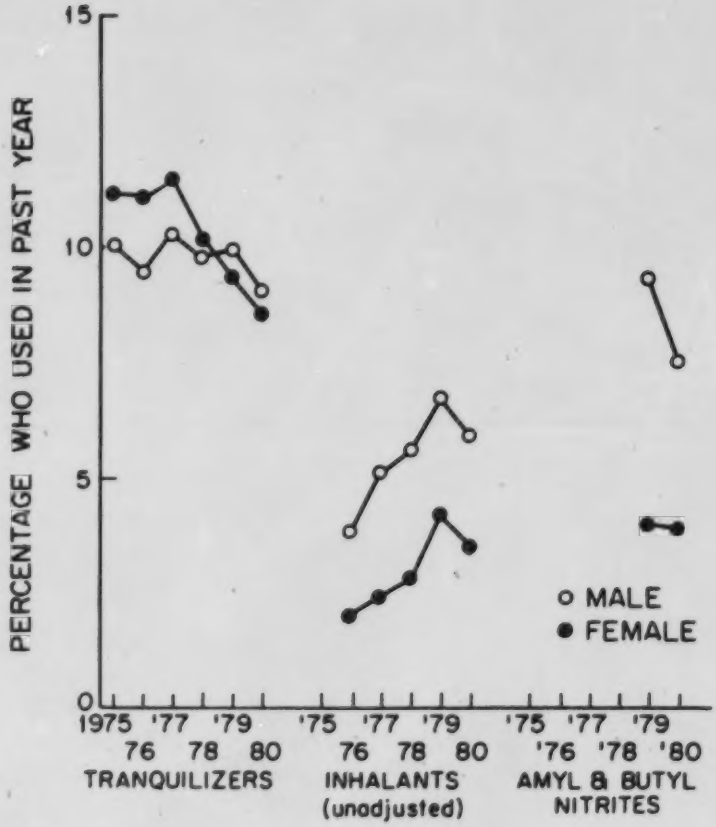
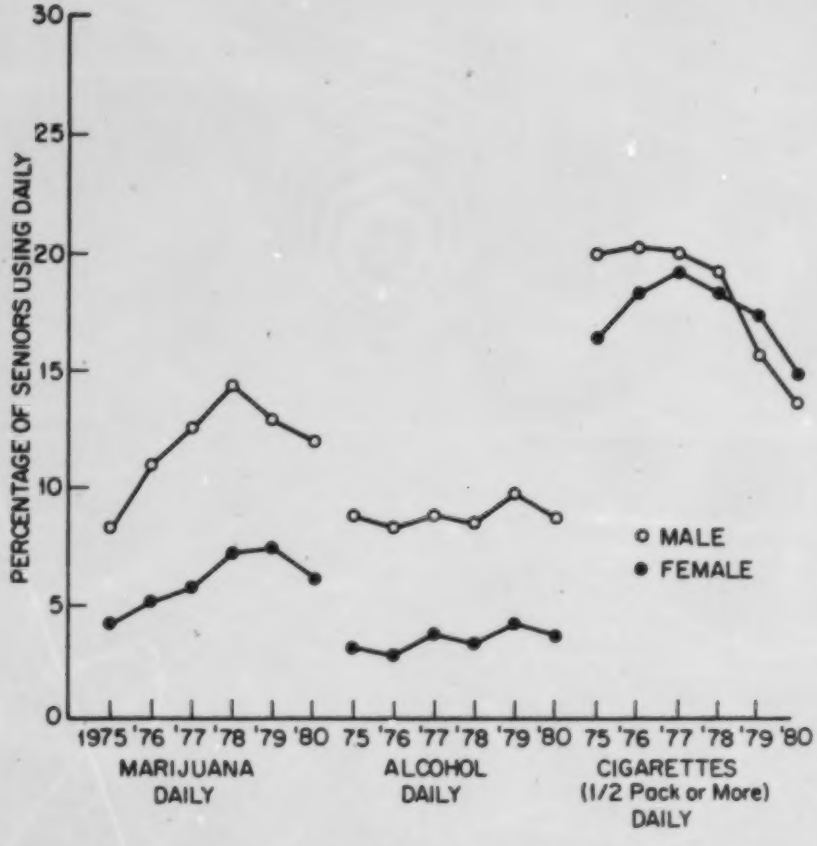


FIGURE F

Trends in Thirty-Day Prevalence of Daily Use of Marijuana, Alcohol, and Cigarettes by Sex



NOTE: Daily use for alcohol and marijuana is defined as use on 20 or more occasions in the past thirty days. Daily use of cigarettes is defined as smoking a half-pack or more per day in the past thirty days.

sexes since 1975, it is now somewhat higher among females (annual prevalence is 22% for females vs. 19% for males).

- This year sedative use among males increased, reversing an earlier trend; while female use continued its earlier decline. This increase for males appears to be due entirely to a sharp increase in their use of methaqualone (annual male prevalence rose from 6.7% to 8.8%), since barbiturate use actually continued its long decline again this year among males, as well as among females. Female use of methaqualone also increased some this year, but not nearly as much as male use.

- Since 1977, the small sex difference involving tranquilizer use (men this age had used them less frequently than women) has disappeared or perhaps even reversed slightly, due primarily to a faster decline among females.

- Overall, the proportion using some illicit drug other than marijuana during the year is now exactly the same for both sexes. (See Figure D.) This reflects a 4% rise this year for females (from 26% to 30%) vs. only 1% for males. Virtually all of the female increase must be due to the rise in amphetamine use, since female use of the other drugs showed negligible or no increase (except for methaqualone, which rose only 0.6%). When we consider the overall proportion using any illicit drug (including marijuana) during the year, we still find a sex difference, but narrowing one. Over the last two years, this statistic has dropped 3% for males (to 56%) while increasing 1% for females (to 50%).

- Regarding cigarette smoking, we observed in 1977 that females for the first time caught up to males at the half-a-pack per day smoking level. Since 1977, both sexes have shown a decline in the prevalence of such smoking, but use among males dropped more in 1979, resulting in a reversal of the sex differences. This year again, both sexes showed a significant drop in half-pack-a-day use. Female use actually dropped more than male use (down 2.4% vs. 1. 9% for males), but females still remain slightly higher (14.7% vs. 13.5%).

Trend Differences Related to College Plans

- Both college-bound and noncollege-bound students have been showing fairly parallel trends in overall illicit drug use over the last several years (see Figure G).*

- Changes in use of the specific drug classes have also been quite parallel for the two groups since 1976, except for sedatives and cocaine.

- The major exception has to do with sedative use, which has risen over the last two years among the noncollege segment while falling slightly among the college-bound. Looking at the two ingredient subclasses of sedatives, barbiturates and methaqualone, we find that the groups show somewhat differential trends on both. Barbiturate use for both groups dropped over the last two years, but only slightly for the noncollege (annual prevalence down 0.1% to a level of 9.0%) compared to the college-bound (down 2.0% to a level of 4.8%). Over the same interval methaqualone use has increased in both groups, but less among the college-bound (up 1.2% to a level of 5.5%) than among the noncollege-bound (up 3.8% to a level of 8.9%). The net result has been a considerable divergence in sedative use.

- On the other hand, there has been some convergence this year in cocaine use, with the noncollege group leveling after a rapid rise, while the college group continues to rise.

Regional Differences in Trends

- In terms of the proportion using any illicit drug during the year, three of the four regions of the country reached their peak in 1978. This year's results suggest that the West, the remaining region, has also peaked. (See Figure H.)

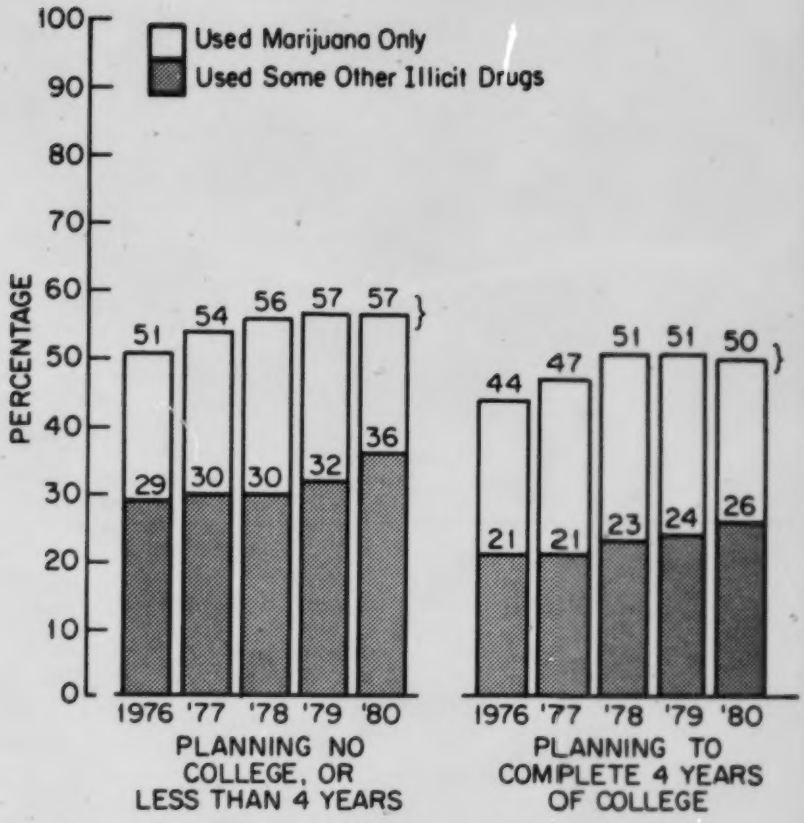
- However, the proportion using an illicit drug other than marijuana currently is increasing in three of the four regions. Only in the Northeast has it been stable for the last two years.

---

*Because of excessive missing data in 1975 on the variable measuring college plans, group comparisons are not presented for that year.

FIGURE G

Trends in Annual Prevalence of Illicit Drug Use by College Plans



NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

- An examination of trends for the specific drug classes reveals that the increase in those three regions is due largely to the increase in stimulant use this year. (Stimulant use was level in the Northeast, following a sharp increase in prior years.)

- The 1978-1979 increase in cocaine use for all regions undoubtedly contributed to the prior year's rise in illicit use but this year only the West showed a continuing rise in cocaine use. Because of its continuing sharp rise, the West is now far higher in cocaine use than the other regions.

Trend Differences Related to Population Density

- From 1975 to 1979, the proportion using any illicit drug increased by about 6% in the large metropolitan areas, and by half again that amount in the other metropolitan and nonmetropolitan areas. As a result, the differences between the very large cities and less metropolitan areas narrowed. Most of the narrowing is due to changing levels of marijuana use and most of it took place prior to 1978. (See Figure I.) It now appears that peak levels in this statistic were reached in all three types of communities by 1979, since all show a slight decrease this year.

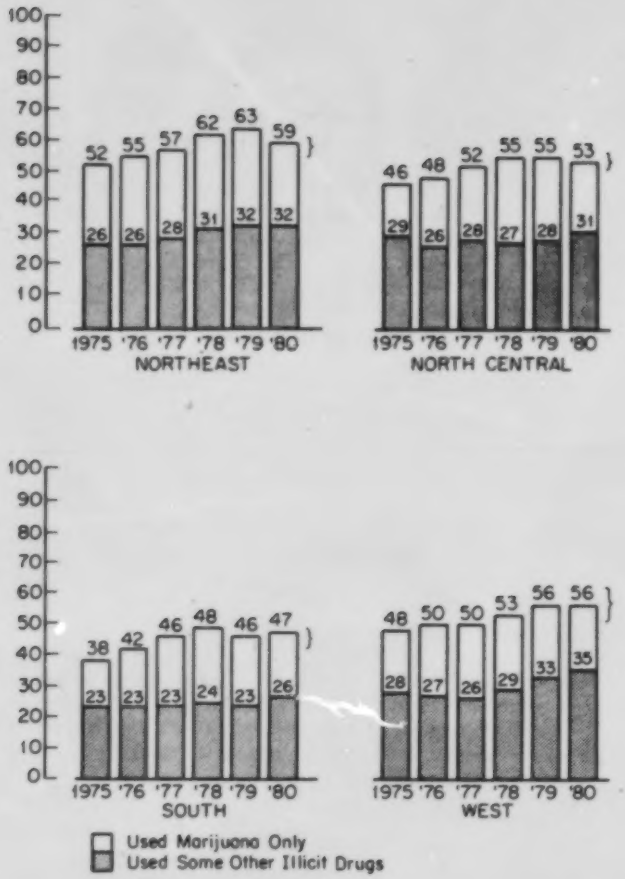
- However, the proportion using some illicit drug other than marijuana has been increasing continuously over the last three years in the very large cities, over the last two years in the smaller metropolitan areas, and over the last year in the non-metropolitan areas.

- The increase in cocaine use, although observed at all levels of urbanicity between 1976 and 1979, was particularly dramatic in the large cities. This year there was some further increase in the large cities, though not elsewhere.

- Since 1976 stimulant use has risen steadily in communities in all three size classess This category of drug, along with cocaine, accounts for the observed increases in the overall proportions using illicit drugs other than marijuana.

FIGURE H

Trends in Annual Prevalence of Illicit Drug Use
by Region of the Country

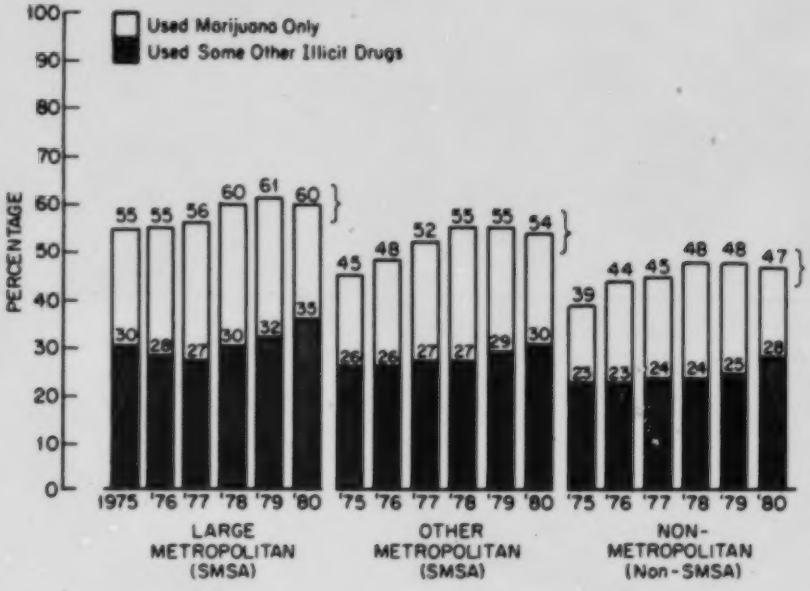


NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

FIGURE I

Trends in Annual Prevalence of Illicit Drug Use by Population Density



NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

USE AT EARLIER GRADE LEVELS

In two of the five questionnaire forms used in the study, respondents are asked to indicate the grade in which they were enrolled when they first tried each class of drugs. Graphic presentations on a drug-by-drug basis of the trends for earlier grade levels and of the changing age-at-onset curves for the various graduating classes are contained in the large 1978 and 1981 reports from the study (cited earlier). For the purposes of these highlights, only some of these figures are included. Table 10 gives the percent of the 1980 seniors who first tried each drug at each of the earlier grade levels.

Grade Level at First Use

- Initial experimentation with most illicit drugs occurs during the final three years of high school. Each illegal drug, except marijuana, had been used by fewer than 7% of the class of 1980 by the time they entered tenth grade. (See Table 10.)

- However, for marijuana, alcohol, and cigarettes, most of the initial experiences took place before high school. For example, daily cigarette smoking was begun by 16% prior to tenth grade vs. only an additional 10% in high school (i.e., in grades ten through twelve). The figures for initial use of alcohol are 55% prior to and 38% during high school; and for marijuana, 31% prior to and 29% during high school.

- Among inhalant users (unadjusted for nitrite underreporting), nearly half had their first experience prior to tenth grade. However, this unadjusted statistic probably reflects the predominant pattern for such inhalants as glues and aerosols, which tend to be used primarily at younger ages. We know that the underreporting of use of amyl and butyl nitrites in this category yields an understatement of the number of students who initiated inhalant use in the upper grade levels. This is apparent from age-at-first-use statistics for this subclass in Table 10. (This information was gathered for the first time this year.)

TABLE 10

Grade of First Use for Sixteen Types of Drugs, Class of 1980

Grade in which drug was first used:	Marijuana	Inhalants[a]	Amyl/Butyl Nitrites	Hallucinogens[a]	LSD	PCP	Cocaine	Heroin	Other Opiates	Stimulants	Sedatives	Barbiturates	Methaqualone	Tranquilizers	Alcohol	Cigarettes (Daily)
6th	1.9	1.4	0.1	0.1	0.1	0.2	0.1	0.2	0.4	0.3	0.3	0.2	0.1	0.3	8.0	3.0
7-8th	13.0	2.4	1.2	0.8	0.5	1.0	0.5	0.0	0.5	1.5	0.9	0.7	0.3	1.6	22.2	7.2
9th	16.5	1.9	2.2	2.2	1.4	1.9	1.7	0.2	1.8	4.3	2.5	2.3	1.3	3.0	24.8	5.8
10th	14.7	2.5	2.6	3.5	2.2	2.7	3.3	0.2	2.1	6.6	3.3	3.0	1.8	3.3	19.3	4.7
11th	9.7	2.0	3.2	4.3	3.3	2.6	5.8	0.2	3.4	7.3	4.8	3.2	3.3	4.4	11.9	3.4
12th	4.4	1.7	1.8	2.4	1.7	1.0	4.3	0.4	1.6	6.3	3.2	1.6	2.8	2.6	7.0	1.7
Never used	39.7	88.1	88.9	86.7	90.7	90.4	84.3	98.9	90.2	73.6	85.1	89.0	90.5	84.8	6.8	74.2

NOTE: This question was asked in two of the five forms (N = approximately 6000), except for inhalants, PCP, and the nitrites which were asked about in only one form (N = approximately 3000).

[a]Unadjusted for known underreporting of certain drugs. See page 14.

- For each illicit drug except inhalants and marijuana, less than half of the users had begun use prior to tenth grade. Among those who had used cocaine by senior year, less than one in six had used prior to tenth grade. For the rest of the illicit drugs, the corresponding proportion is roughly from one-quarter to one-third. These data do indicate, however, that significant minorities of eventual users of these drugs are initiated into illicit drug use prior to tenth grade.

- Age at first use statistics for PCP, also available for the first time this year, show a similar pattern of initiation as the more general class (hallucinogens) to which it belongs.

Trends in Use at Earlier Grade Levels

- Using the retrospective data provided by each of the last five senior classes concerning their grade at first use, it is possible to reconstruct lifetime prevalence curves at lower grade levels during the years when these five classes were at those various grade levels. Obviously, data from eventual dropouts from school are not included in any of the curves. Figures J-1 through J-15 show the reconstructed lifetime prevalence curves for earlier grade levels for a number of drugs.

- Figure J-1 provides the trends at each grade level for lifetime use of any illicit drug. It shows that for all grade levels above sixth grade there was a continuous increase in illicit drug involvement through the seventies.

- However, most of this increase was due to increasing proportions using marijuana. We know this from the results in Figure J-2 showing trends for each grade level in the proportion having used any illicit drug other than marijuana in their lifetime. These trend lines are relatively flat throughout the seventies and, if anything, began to taper off among ninth and tenth grade between 1975 and 1978. Presumably the mix of illicit drugs used varied from year to year, as we know to be the case among seniors, even though the overall proportion of students involved remained relatively stable. (The findings presented below strongly suggest that this was, in fact, the case.)

- As can be seen in Figure J-3, for the years covered across the decade of the 70's, marijuana use has been rising steadily at all grade levels down through eighth grade. However, the trend lines for all grade levels show a decelerating curve, suggesting they all reach an

asymptote by the end of the seventies, as we know is the case for 12th graders. Importantly, there appears to have been little ripple effect in marijuana use down to the elementary schools, through 1974. The two most recent national household surveys by NIDA would suggest that this continues to be true: the proportion of 12 to 13 year olds reporting any experience with marijuana was 6% in 1971, 8% in 1977, and 8% in 1979. Presumably sixth graders would have even lower absolute rates since the average age for sixth graders is less than twelve.*

- Cocaine use (Figure J-4) presents a somewhat more uneven picture, perhaps because the scale has been magnified to show the smaller percentages. In spite of the unevenness, two clear contrasts to the marijuana pattern may be drawn. First, there is no suggestion that the curves reach an asymptote by the end of the seventies (though we may see that happen in the eighties). Second, most initiation into cocaine use takes place in the last two years of high school (rather than earlier, as is the case for marijuana).

- The lifetime prevalence statistics for stimulants peaked briefly for grade levels 9 through 12 during the mid 70's. (See Figure J-5.) However, it appears to be rising again in the late 70's, at least in the upper grades (for which we have sufficiently recent data).

- Lifetime prevalence of hallucinogen use (unadjusted for underreporting of PCP) began declining among students at most grade levels in the mid 1970's (see Figure J-6). The trend curves for LSD are very similar in shape, though at a lower level, of course.

- While questions about age at first use for inhalants (unadjusted for the nitrities) have been asked of only the last three classes, the retrospective trend curves (Figure J-7) suggest that such inhalant use also was dropping for most grade levels during the mid to late seventies.

- Figure J-8 shows that the lifetime prevalence of sedative use, like stimulant use, began declining for all grade levels in the mid 70's. (Recall that until this year, annual prevalence observed for seniors also has been declining steadily since 1975.) As the graphs for the two subclasses of sedatives—barbiturates and

---

*See National Survey on Drug Abuse: Main Findings 1979 by P.M. Fishburne, H.I. Abelson, and I. Cisin. Rockville, Md: National Institute on Drug Abuse, 1980.

methaqualone—show, the trend lines have been different for them at earlier grade levels as well as in twelfth grade (see Figures J-9 and J-10). Lifetime prevalence of barbiturates has fallen off sharply at all grade levels since about 1974 or 1975. Methaqualone use started to fall off at about that time in the lower grade levels but dropped rather little and then flattened. The fact that the current increase in sedative use among seniors is due to methaqualone (which at present tends to be used at older ages), could result in the sedative trend lines leveling or increasing at upper grades while continuing to drop at lower grades (where methaqualone use accounts for less of the total).

- Lifetime prevalence for tranquilizers also began to decline at all earlier grade levels between 1975 and 1977. However another year of data collection will be required to see if that trend stopped at lower grades (as is true for the sedatives) or continued (as it has for tranquilizer use among eleventh and twelfth graders). Overall, it would appear that the tranquilizer trend lines have been following a similar, but slightly lagged, course to that of sedatives (unadjusted).

- Though a little difficult to see, the heroin lifetime prevalence figures for grades 9 through 12 all began declining in the mid 1970's and show no evidence of reversal as yet (Figure J-12). The lifetime prevalence of use of opiates other than heroin appears to have remained quite flat at all grade levels since the mid seventies (Figure J-13).

- Figure J-14 presents the lifetime prevalence curves for cigarette smoking on a daily basis. It shows that initiation to daily smoking was beginning to peak at the lower grade levels in the mid 1970's. This peaking did not become apparent among high school seniors until later in the 70's.

- The comparable curves for lifetime prevalence of alcohol use at earlier grade levels (Figure J-15) are very flat, suggesting that very little change took place at earlier grade levels across the years covered. Recall, however, that the most important changes in alcohol use observed among seniors involved the prevalence of drinking a large quantity of alcohol on occasion, which did increase slightly from 1975 to 1979. It is altogether possible that similar shifts have been taking place in lower grade levels, as well.

FIGURE J-1

Use of Any Illicit Drug: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

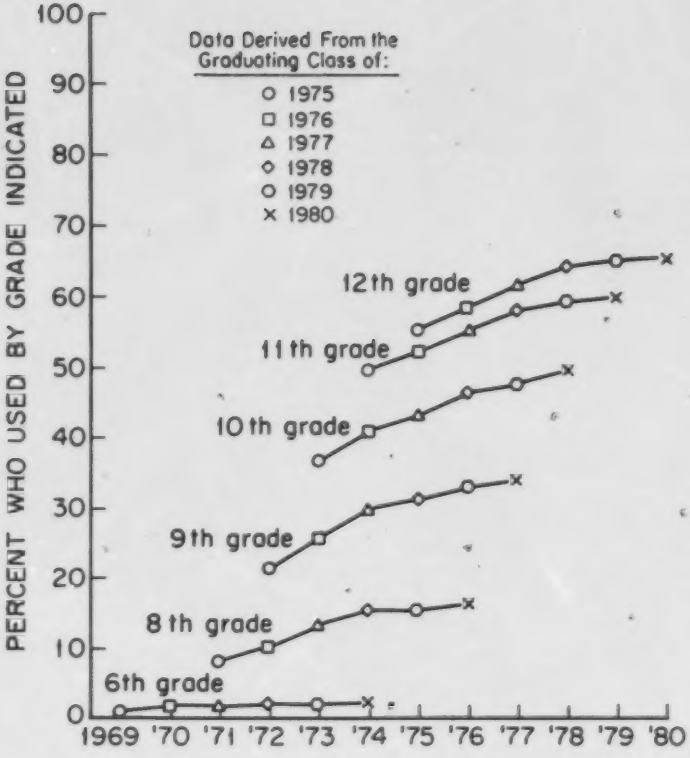
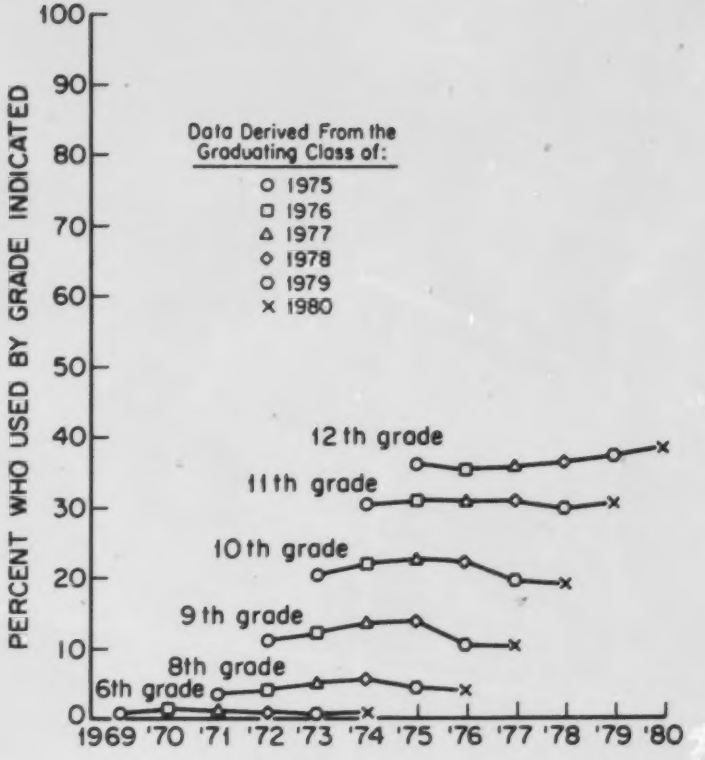


FIGURE J-2

Use of Any Illicit Drug Other Than Marijuana: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors



62

FIGURE J-3

Marijuana: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

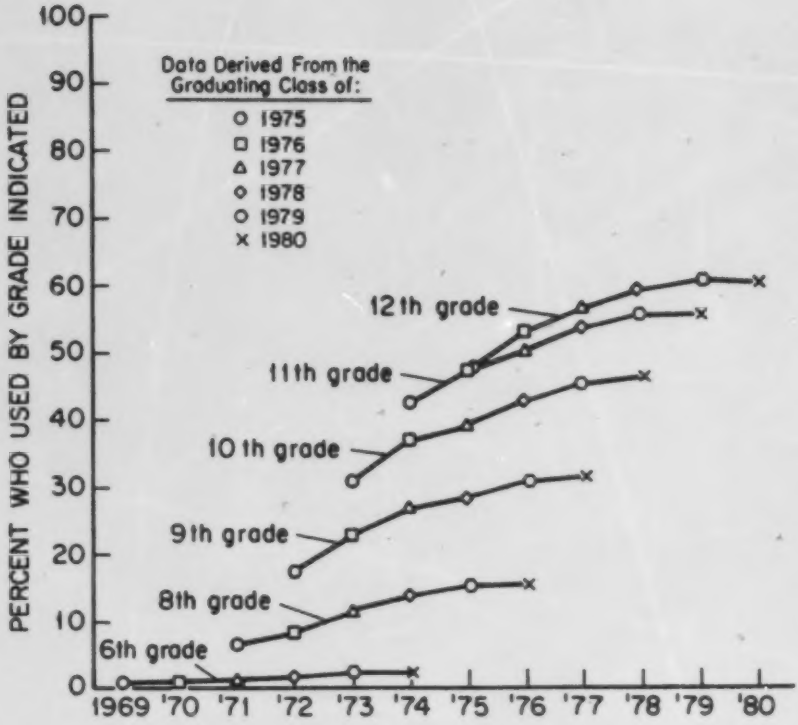


FIGURE J-4

Cocaine: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

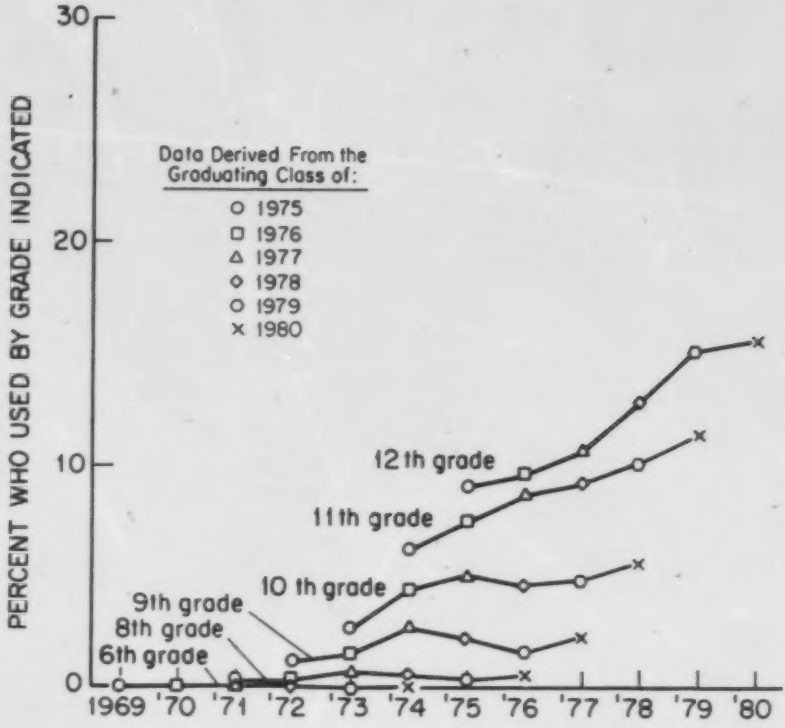


FIGURE J-5

Stimulants: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

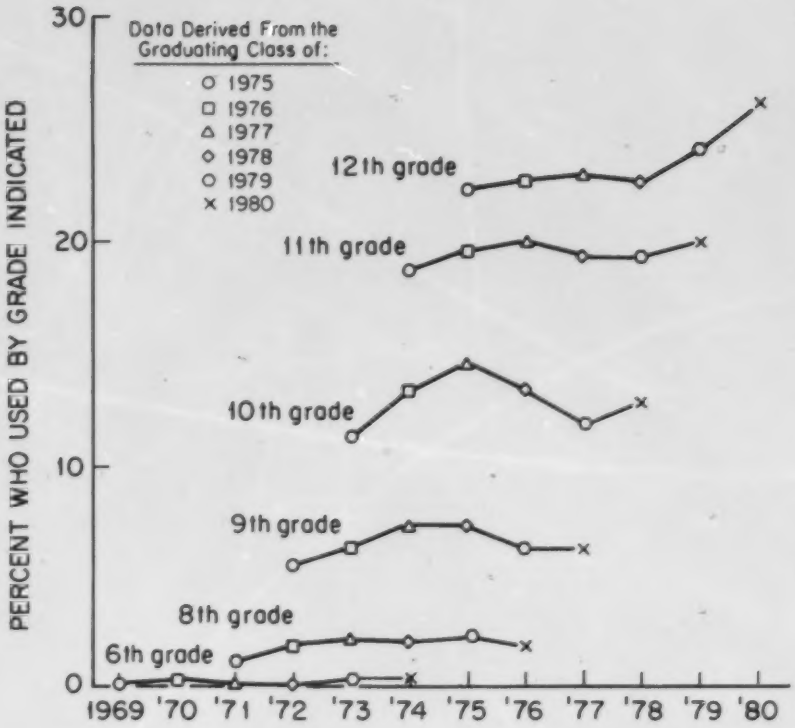


FIGURE J-6

Hallucinogens: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

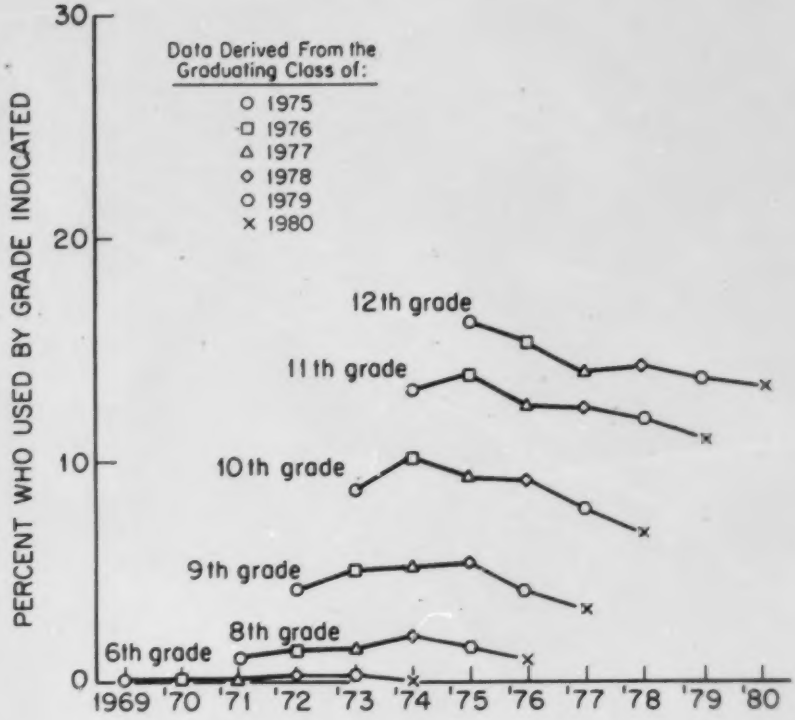


FIGURE J-7

Inhalants: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

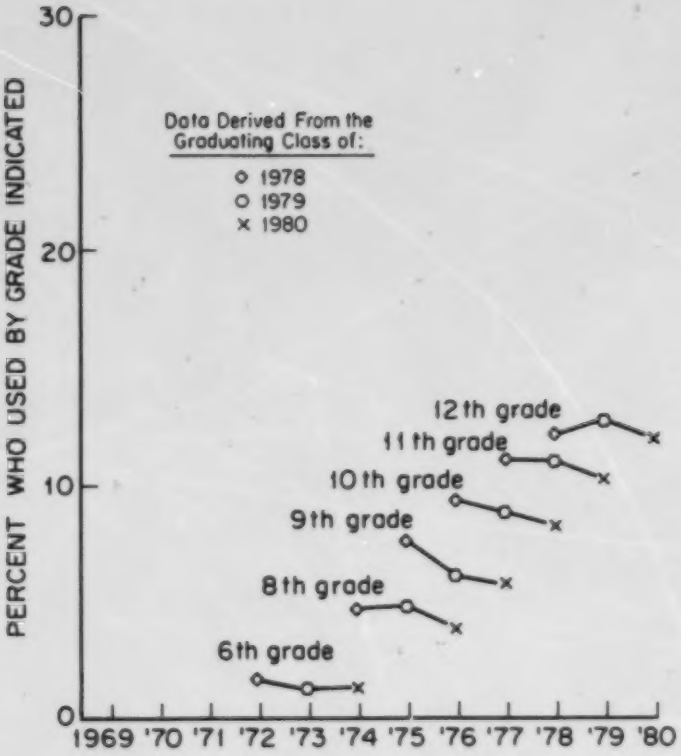


FIGURE 3-8

Sedatives: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

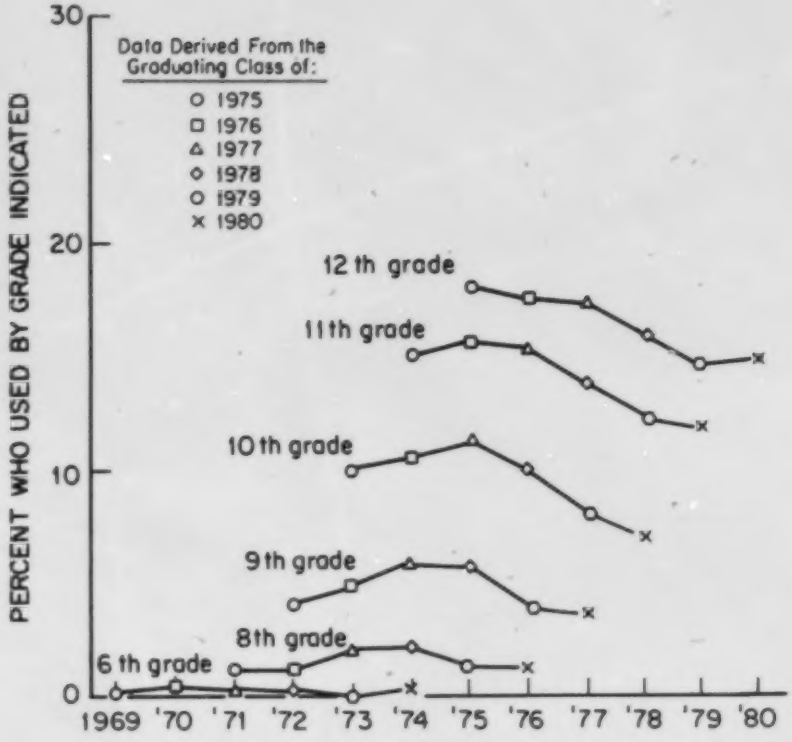


FIGURE 3-9

Barbiturates: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

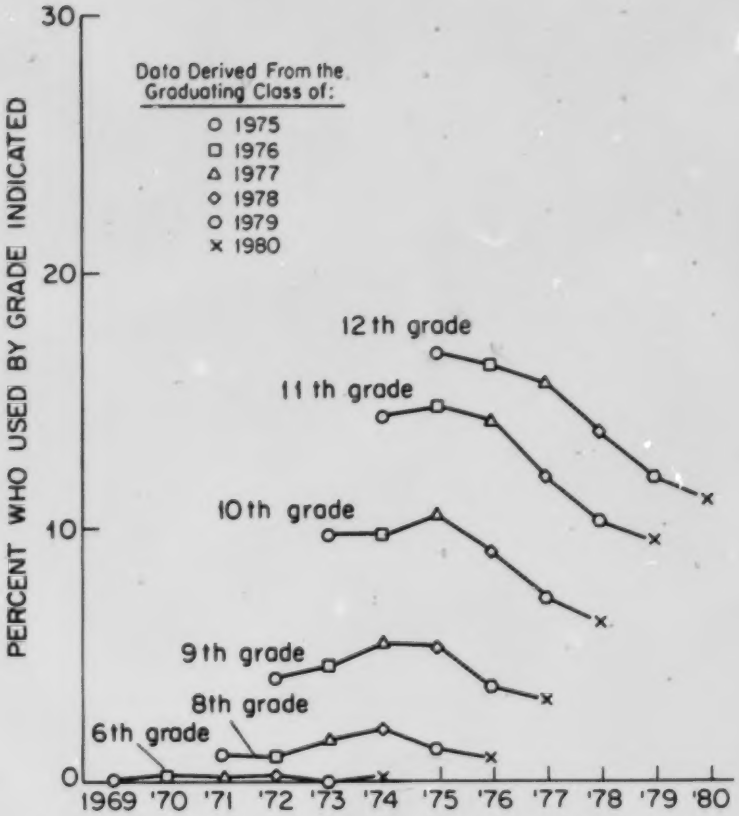


FIGURE J-10

Methaqualone: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

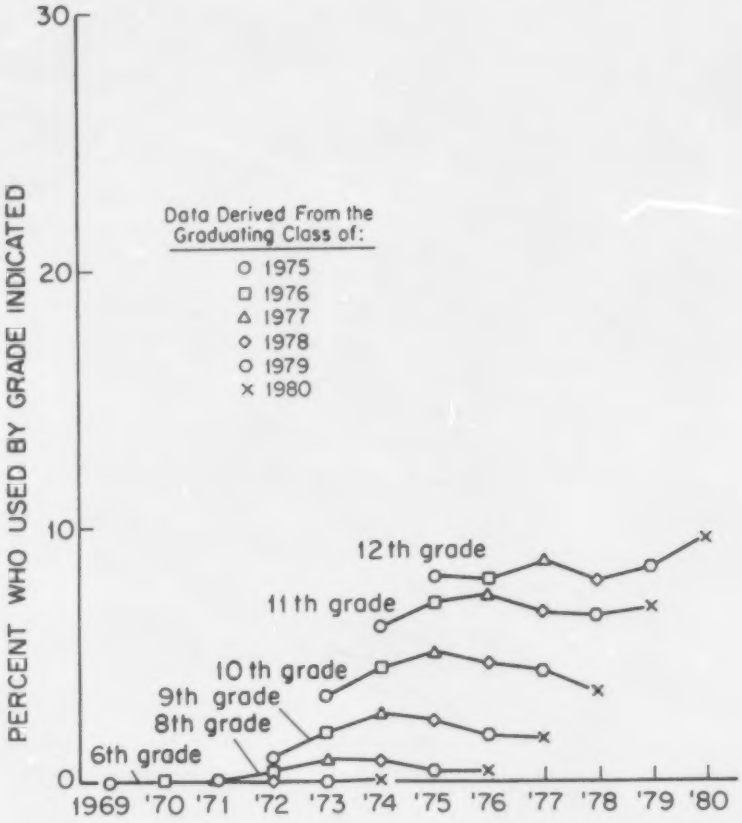


FIGURE 3-11

Tranquilizers: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

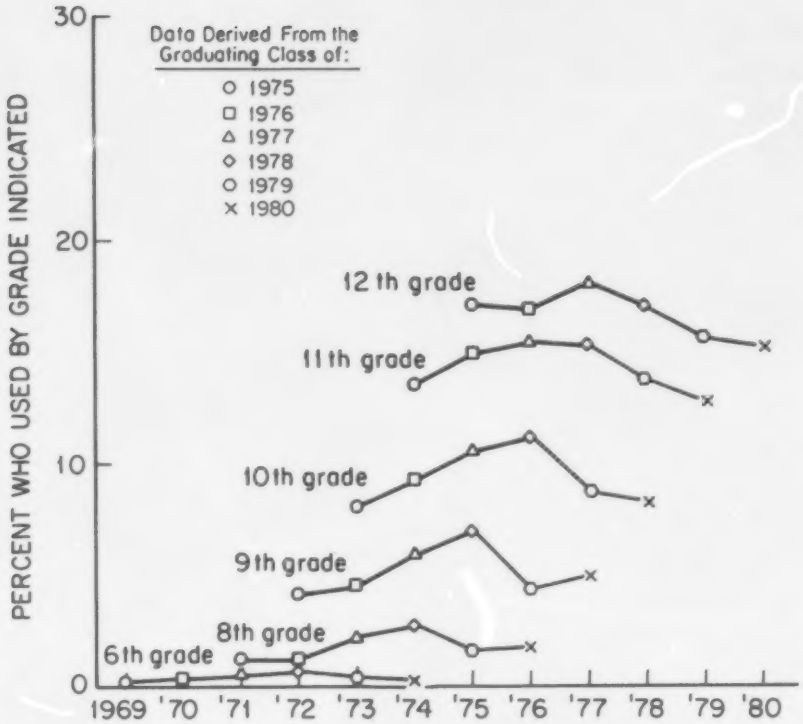
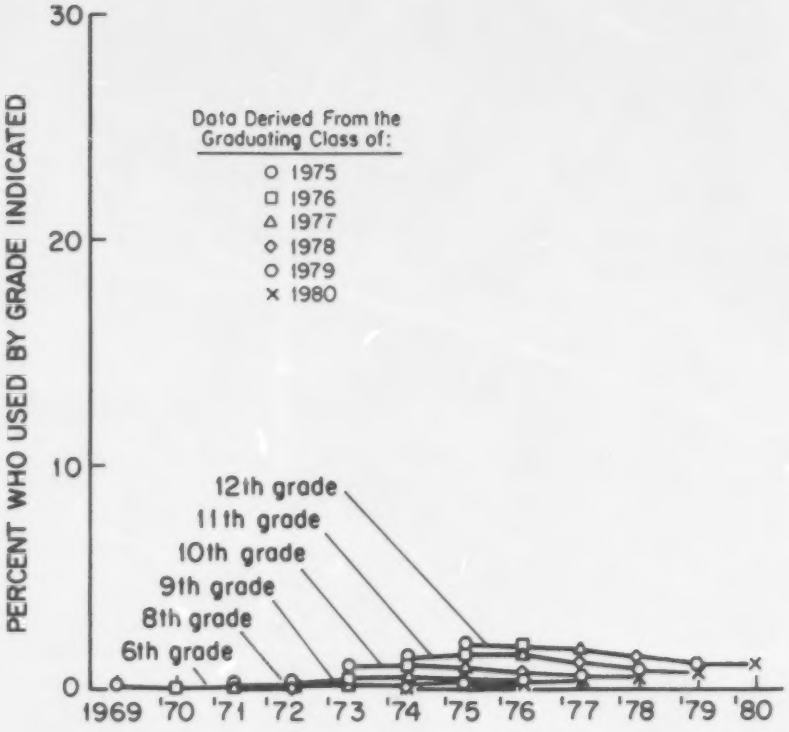


FIGURE J-12

Heroin: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors



72

FIGURE J-13

Other Opiates: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

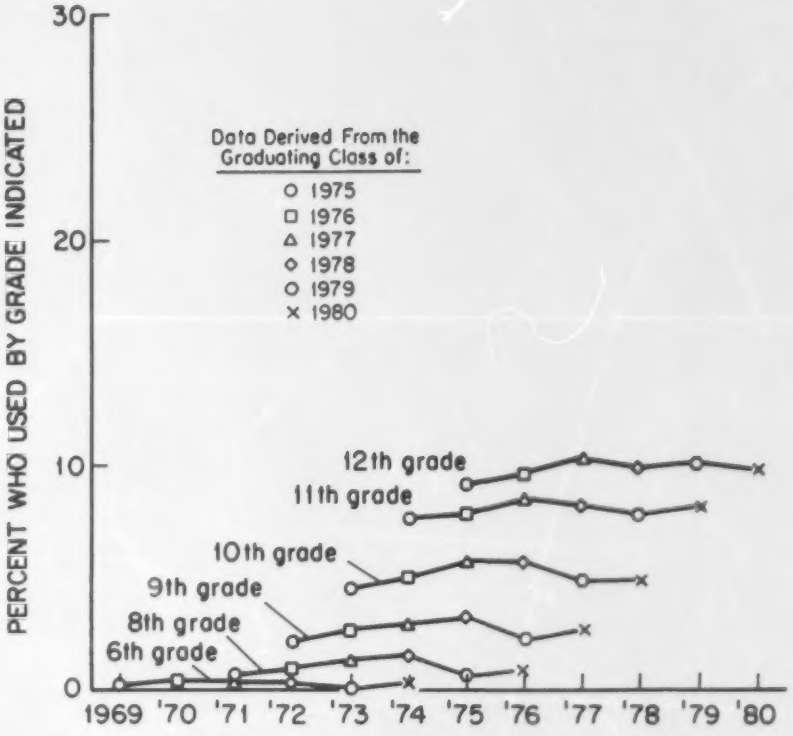


FIGURE J-14

Cigarettes: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

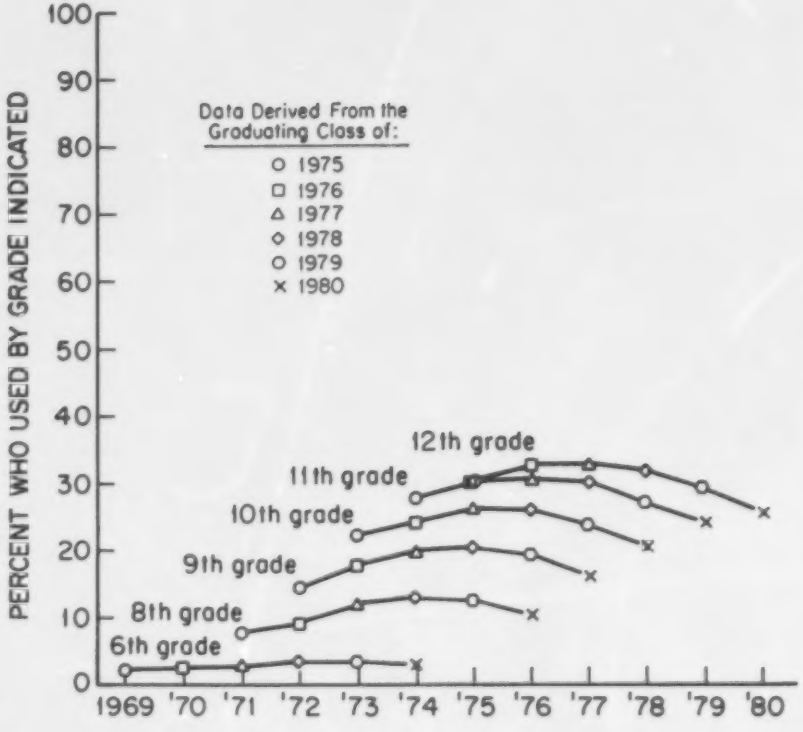
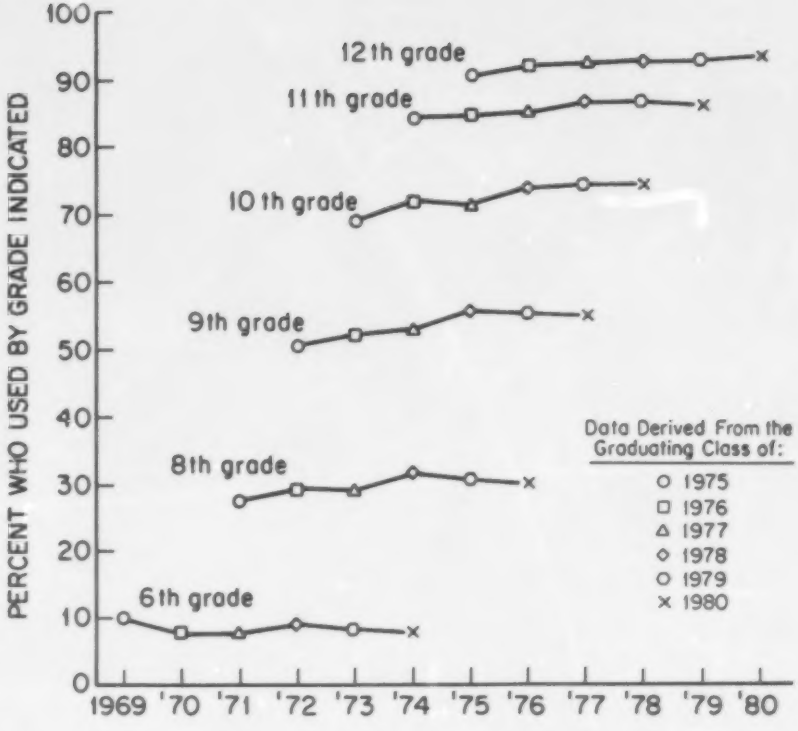


FIGURE J-15

Alcohol: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors



DEGREE AND DURATION OF HIGHS

On one of the five questionnaire forms, seniors who report use of a drug during the prior twelve months are asked how long they usually stay high and how high they usually get on that drug. These measures were developed both to help characterize the drug-using event and to provide indirect measures of dose or quantity of drugs consumed.

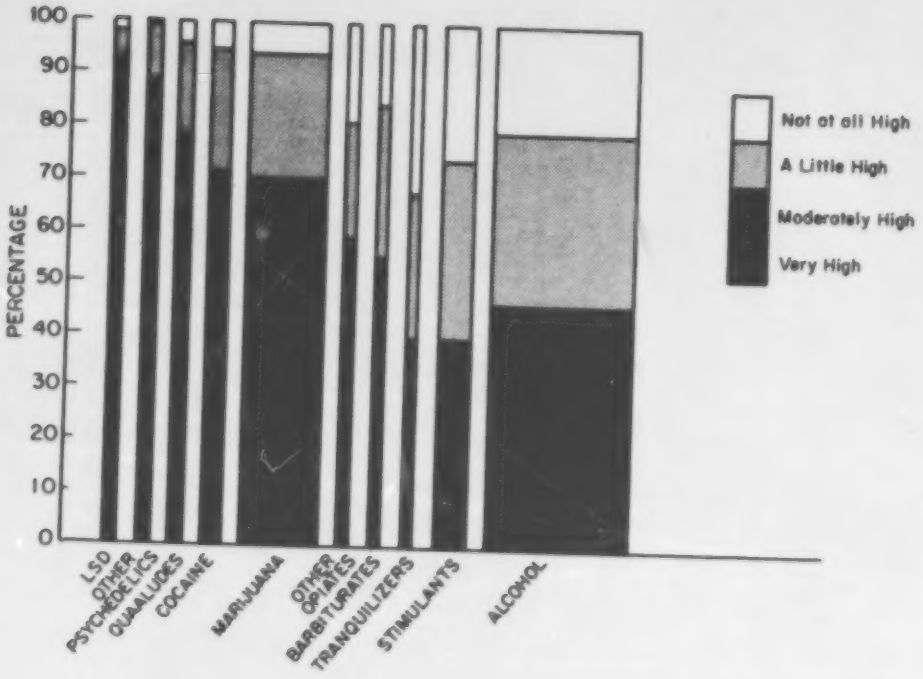
- Figure K shows the proportion of 1980 seniors who say that they usually get "not at all" high, "a little" high, "moderately" high, or "very" high when they use a given type of drug. The percentages are based on all respondents who report use of the given drug class in the previous twelve months, and therefore each bar cumulates to 100%. The ordering from left to right is based on the percentage of users of each drug who report that they usually get "very" high. (The width of each bar is proportional to the percentage of all seniors having used the drug class in the previous year; this should serve as a reminder that even though a large percentage of users of a drug may get very high, they may represent only a small proportion of all seniors.)

- The drugs which usually result in intense highs are the hallucinogens (LSD and other hallucinogens), heroin and methaqualone (Quaaludes). (Actually, heroin has been omitted from Figure K because of the small number of cases available for a given year, but an averaging across years indicates that it would rank a close second, after LSD.)

- Next come cocaine and marijuana, with over 70% of the users of each saying they usually get moderately high or very high when using the drug.

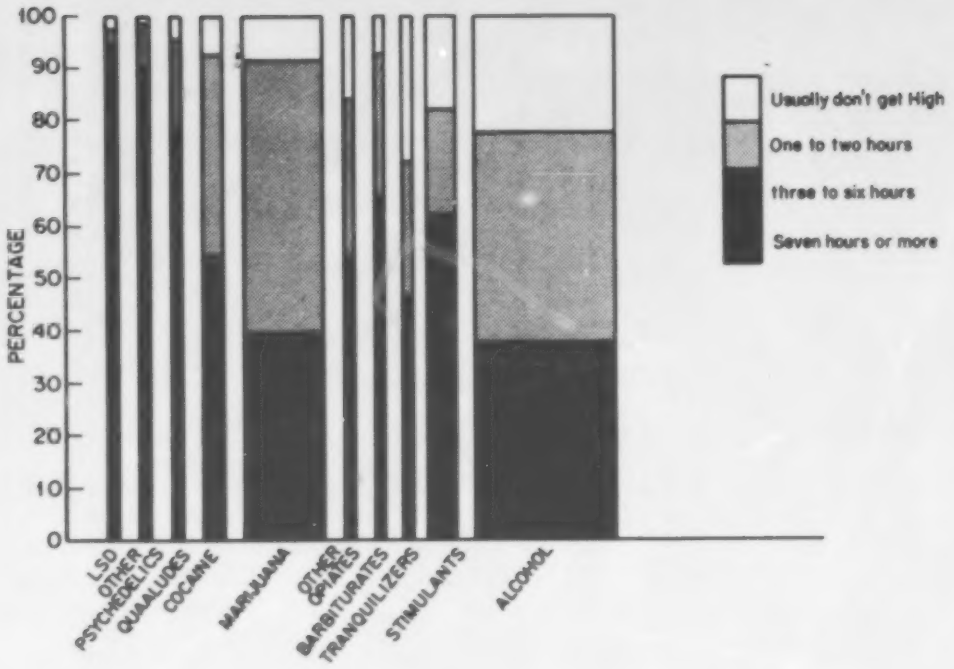
- The four major psychotherapeutic drug classes—barbiturates, opiates other than heroin, stimulants, and tranquilizers—are less often used to get high; but substantial proportions of users (from 40% to 60%) still say they usually get moderately or very high after taking these drugs.

FIGURE K:
Degree of High Attained by Recent Users



NOTE: Heroin has been omitted from this figure because of the small number of heroin users who received these particular questions. The width of each bar is proportionate to the number of seniors reporting any use of each drug in the prior 12 months.

FIGURE L:
Duration of High Attained by Recent Users



NOTE: Heroin has been omitted from this figure because of the small number of heroin users who received these particular questions. The width of each bar is proportionate to the number of seniors reporting any use of each drug in the prior 12 months.

- Relatively few of the many seniors using alcohol say that they usually get very high when drinking, although nearly half usually get at least moderately high. However, for a given individual we would expect more variability from occasion to occasion in the degree of intoxication achieved with alcohol than with most of the other drugs. Therefore, many drinkers get very high at least sometimes, even if that is not "usually" the case.

- Figure L presents the data on the duration of the highs usually obtained by users of each class of drugs. The drugs are arranged in the same order as for intensity of highs to permit an examination of the amount of correspondence between the degree and duration of highs.

- As can be seen in Figure L, those drugs which result in the most intense highs generally tend to result in the longest highs. For example, LSD, other hallucinogens, and methaqualone rank one through three respectively on both dimensions, with substantial proportions (from 22% to 60%) of the users of these drugs saying they usually stay high for seven hours or more. And alcohol ranks last on both dimensions; most users stay high for two hours or less.

- However, there is not a perfect correspondence between degree and duration of highs. The highs achieved with marijuana, although intense for many users, tend to be relatively short-lived in comparison with most other drugs. The majority of users usually stay high less than three hours, and the modal and median time is one to two hours.

- For cocaine users the modal high is one to two hours, though nearly as many stay high three to six hours. Longer highs are reported by 19%.

- The modal and median duration of highs for the four classes of psychotherapeutic drugs—barbiturates, opiates other than heroin, stimulants, and tranquilizers—tend to be three to six hours.

- In sum, the drugs vary considerably in both the duration and degree of the highs usually obtained with them. (These data obviously do not address the qualitative differences in the experiences of being "high.") Sizeable proportions of the users of all of these drugs report that they usually get high for at least three hours per occasion, and for a number of drugs appreciable proportions usually stay high for seven hours or more.

Trends in Degree and Duration of Highs

- There have been several shifts over the last five years in the degree or duration of highs usually experienced by users of the various drugs.

- The average duration of the highs reported by LSD users seems to have declined somewhat. In 1975, 74% of the recent LSD users reported usually staying high seven hours or more; by 1979 this proportion dropped to 60%, and it remained at the same level this year.

- For cocaine, the proportion who say they usually get high for only two hours or less has increased from 34% in 1975 to 45% in 1980, reflecting a shortening in the average duration of highs.

- For opiates other than heroin, there had been a steady decline between 1975 and 1979 in both the intensity of the highs usually experienced and in the duration of those highs. In 1975, 39% said they usually got "very high" vs. 18% in 1979. The proportion usually staying high for seven or more hours dropped from 28% in 1975 to 13% in 1979. This year both statistics remained unchanged, however.

- Stimulants have shown a substantial decrease in the proportion usually getting very high or moderately high (from 60% in 1975 to 40% in 1980). This year's drop was 9%. Conversely, the proportion of users saying they "don't take them to get high" increased from 9% in 1975 to 17% by 1979 (no change this year). Also, the average reported duration of stimulant highs has been declining; 41% of the 1975 users said they usually stayed high seven or more hours vs. 26% of the 1979 users vs. 19% of the 1980 users. These substantial decreases in the degree and duration of highs experienced by amphetamine users could hardly be explained by the modest increase in prevalence. What seems more likely is a shift in the purposes for which they are used. An examination of data (not presented here) on self-reported reasons for use tends to confirm this conclusion. The proportion of amphetamine users in the prior year who indicate that "to feel good or get high" was one of their purposes has declined from 62% in 1976 to 48% in 1980. More are now giving as reasons "to help me lose weight," and "to get through the day." The proportion giving as a reason "to stay awake" or "to get more energy"—two of the most commonly mentioned reasons for using this class of drugs—has not changed.

- There is some evidence this year of the degree of highs usually achieved by barbiturate users decreasing. No such decline in the degree of highs is observed for methaqualone, but the average duration of the methaqualone highs does seem to have dropped sharply this year.

- For marijuana there has been a slight downward trend in the degree of the highs obtained, but only since 1978. There have been some more interesting changes taking place in the duration figures. Recall that most marijuana users say they usually stay high either one to two hours or three to six hours. Since 1975 there has been a steady shift in the proportions selecting each of these two categories: a lower proportion of recent users answered three to six hours in 1980 (35% vs. 45% in 1975) while a higher proportion answered one to two hours in 1980 (52% vs. 40% in 1975). Until 1979 this shift could have been due almost entirely to the fact that progressively more seniors were using marijuana; and the users in more recent classes, who would not have been users in earlier classes, tended to be relatively light users. We deduce this from the fact the percentage of all seniors reporting three-to-six-hour highs remained relatively unchanged from 1975 to 1979, while the percentage of all seniors reporting one to two hour highs had been increasing steadily (from 16% in 1975 to 25% in 1979).

  However, the overall prevalence rate did not increase this year (annual prevalence actually dropped by 2%), but the shift toward shorter average highs continued. Thus we must attribute this recent shift to another factor, and the one which seems most likely is a general shift (even among the most marijuana-prone segment) toward a less frequent (or less intense) use of the drug. This year's drop in daily prevalence, which is disproportionate to the drop in overall prevalence, would be consistent with this interpretation.

- There are no clearly discernible patterns in the intensity or duration of the highs being experienced with the remaining classes of drugs on which we have the relevant data—i.e., hallucinogens other than LSD (taken as a class), tranquilizers, and alcohol. (Data have not been collected for highs experienced in the use of inhalants, the nitrites specifically, or PCP specifically; and the number of admitted heroin users on a single questionnaire form is inadequate to estimate trends reliably.)

ATTITUDES AND BELIEFS ABOUT DRUGS

This section presents the cross-time results for three sets of attitude and belief questions. One set concerns how harmful the students think various kinds of drug use would be for the user, the second concerns how much they personally disapprove of various kinds of drug use, and the third asks about attitudes on the legality of using various drugs under different conditions. (The next section deals with the closely related topics of parents' and friends' attitudes about drugs, as the seniors perceive them.)

As the data below show, overall percentages disapproving various drugs, and the percentages believing their use to involve serious risk, both tend to parallel the percentages of actual users. Thus, for example, of the illicit drugs marijuana is the most frequently used and the least likely to be seen as risky to use. This and many other such parallels suggest that the individuals who use a drug are less likely to disapprove use of it or to view its use as involving risk. However, such a comparison of overall percentages, though strongly suggestive, does not establish that a comparable relationship exists at the individual level. Therefore, an extensive series of individual-level analyses of these data was conducted, and the results confirm that strong correlations exist between individual use of drugs and the various attitudes and beliefs about those drugs. Those seniors who use a given drug also are more likely to approve its use, downplay its risks, and report their own parents and friends as being at least somewhat more accepting of its use.

The attitudes and beliefs about drug use reported below have been changing during recent years, along with actual behavior. In particular, views about marijuana use, and legal sanctions against use, have shown important trends. A number of states have enacted legislation which in essence removes criminal penalties for marijuana use, others have such legislation pending, and one (Alaska) has had certain types of use "decriminalized" by judicial decision. President Carter recommended Federal decriminalization, a stand that would have been considered extremely radical only a few years ago. Certainly such events, and also the positions taken by the National Commission on Marijuana and Drug Abuse, the American Bar Association, the American Medical Association, and Consumers Union, are likely to have had an effect on public attitudes, and our trend data suggest that they did.

However, over the last two years or so scientists, policy makers, and in particular the electronic and printed media, have given considerable attention to the increasing levels of regular marijuana use among young people, and to the potential hazards associated with such use. As will be seen below, over the last two years attitudes about regular use of marijuana have shifted in a more conservative direction—a shift which coincides with a reversal in the previous rapid rise of daily use, and which very likely reflects the impact of this increased public attention.

Perceived Harmfulness of Drugs

Beliefs in 1980 about Harmfulness

- A substantial majority of high school seniors perceive regular use of any of the illicit drugs, other than marijuana, as entailing "great risk" of harm for the user (see Table 11). Some 86% of the sample feel this way about heroin—the highest proportion for any of these drugs—while 83% associate great risk with using LSD. The proportions attributing great risk to amphetamines, barbiturates, and cocaine are all around 70%.

- Regular use of cigarettes (i.e., one or more packs a day) is judged by the majority (64%) as entailing a great risk of harm for the user.

- In contrast to the above figures, regular use of marijuana is judged to involve great risk by only 50% of the sample.

- Regular use of alcohol was more explicitly defined in several questions. Very few (20%) associate much risk of harm with having one or two drinks almost daily. Only about a third (36%) think there is great risk involved in having five or more drinks once or twice each weekend. Considerably more (66%) think the user takes a great risk in consuming four or five drinks nearly every day.

- Compared with the above perceptions about the risks of regular use of each drug, many fewer respondents feel that a person runs a "great risk" of harm by simply trying the drug once or twice.

- Very few think there is much risk in using marijuana experimentally (10%) or even occasionally (15%).

- Experimental use of the other illicit drugs, however, is still viewed as risky by a substantial proportion. The percentage associating great risk with experimental use ranges from about 30% for amphetamines and barbiturates to 52% for heroin.

TABLE 11

Trends in Perceived Harmfulness of Drugs

Q. *How much do you think people risk harming themselves (physically or in other ways), if they...*	Percent saying "great risk"[a] Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	'79-'80 change
Try marijuana once or twice	15.1	11.4	9.5	8.1	9.4	10.0	*+0.6*
Smoke marijuana occasionally	18.1	15.0	13.4	12.4	13.5	14.7	*+1.2*
Smoke marijuana regularly	43.3	38.6	36.4	34.9	42.0	50.4	*+8.4 sss*
Try LSD once or twice	49.4	45.7	43.2	42.7	41.6	43.9	*+2.3*
Take LSD regularly	81.4	80.8	79.1	81.1	82.4	83.0	*+0.6*
Try cocaine once or twice	42.6	39.1	35.6	33.2	31.5	31.3	*-0.2*
Take cocaine regularly	73.1	72.3	68.2	68.2	69.5	69.2	*-0.3*
Try heroin once or twice	60.1	58.9	55.8	52.9	50.4	52.1	*+1.7*
Take heroin occasionally	75.6	75.6	71.9	71.4	70.9	70.9	*0.0*
Take heroin regularly	87.2	88.6	86.1	86.6	87.5	86.2	*-1.3*
Try an amphetamine once or twice	35.4	33.4	30.8	29.9	29.7	29.7	*0.0*
Take amphetamines regularly	69.0	67.3	66.6.	67.1	69.9	69.1	*-0.8*
Try a barbiturate once or twice	34.8	32.5	31.2	31.3	30.7	30.9	*+0.2*
Take barbiturates regularly	69.1	67.7	68.6	68.4	71.6	72.2	*+0.6*
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	5.3	4.8	4.1	3.4	4.1	3.8	*-0.3*
Take one or two drinks nearly every day	21.5	21.2	18.5	19.6	22.6	20.3	*-2.3*
Take four or five drinks nearly every day	63.5	61.0	62.9	63.1	66.2	65.7	*-0.5*
Have five or more drinks once or twice each weekend	37.8	37.0	34.7	34.5	34.9	35.9	*+1.0*
Smoke one or more packs of cigarettes per day	51.3	56.4	58.4	59.0	63.0	63.7	*+0.7*
N =	(2804)	(3225)	(3570)	(3770)	(3250)	(3234)	

NOTE: Level of significance of difference between the two most recent classes: *s*= .05, *ss*= .01, *sss*= .001.

[a]Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, Drug unfamiliar.

- Practically no one (4%) believes there is much risk involved in trying an alcoholic beverage once or twice.

Trends in Perceived Harmfulness

- Several very important trends have been taking place over the last five years in these beliefs about the dangers associated with using various drugs.

- One of the most important involves marijuana. There had been until 1979 a steady decline in the harmfulness perceived to be associated with all levels of marijuana use, but in 1979, for the first time, there was an increase in these proportions—an increase which continued this year. The most impressive increase by far occurs for regular marijuana use, where there has been a full 15% jump in just two years in the proportion perceiving it as involving great risk—i.e., from 35% in 1978 to 50% in 1980. As stated above, this change has occurred during a period in which a substantial amount of media attention has been devoted to the potential dangers of heavy marijuana use.

- There also has been a substantial and steady increase (of 13%) over a longer period in the number who think pack-a-day cigarette smoking involves great risk to the user (from 51% in 1975 to 64% in 1980), a particularly encouraging finding. This shift parallels, and to some degree even precedes, the downturn in regular smoking found in this age group.

- From 1975 to 1979 there had been a modest but consistent trend in the direction of fewer students associating much risk with experimental or occasional use of most of the illicit drugs. This trend generally did not continue this year, however.

- In particular, the percentage who think there is great risk in trying cocaine once or twice has dropped continuously from 43% in 1975 to 31% in 1980, which generally parallels a period of rapidly increasing use. The proportion seeing great risk in regular cocaine use dropped somewhat from 1975 to 1977, but thereafter has remained fairly steady.

Personal Disapproval of Drug Use

A set of questions was developed to try to measure any general moralistic sentiment attached to various types of drug use. The phrasing, "Do you disapprove of people (who are 18 or older) doing each of the following" was adopted.

Extent of Disapproval in 1980

- The great majority of these students do not condone regular use of any of the illicit drugs. Even regular marijuana use is disapproved by 75%, and regular use of each of the other illicits receives disapproval from between 91% and 98% of today's high school seniors (see Table 12).

- Smoking a pack (or more) of cigarettes per day receives the disapproval of fully 71% of the age group.

- Drinking at the rate of one or two drinks daily also receives disapproval from two-thirds of the seniors (69%). A curious finding is that weekend binge drinking (five or more drinks once or twice each weekend) is acceptable to more seniors than is moderate daily drinking. While only 56% disapprove of having five or more drinks once or twice a weekend, 69% disapprove of having one or two drinks daily. This is in spite of the fact that great risk is more often attached to the weekend binge drinking (36%) than to the daily drinking (20%). One possible explanation for these seemingly inconsistent findings may stem from the fact that a greater proportion of this age group are themselves weekend binge drinkers rather than regular daily drinkers. They have thus expressed attitudes accepting of their own behavior, even though they may be inconsistent with their beliefs about possible consequences.

- For all drugs fewer people indicate disapproval of experimental or occasional use than of regular use, as would be expected. The differences are not great, however, for the illicit drugs other than marijuana. For example, 76% disapprove experimenting with cocaine vs. 91% who disapprove its regular use.

- For marijuana the rate of disapproval is substantially less for experimental use (39%) and occasional use (50%) than for regular use (75%). In other words, only about four out of every ten disapprove of trying marijuana, and only half disapprove of occasional use of the drug.

Trends in Disapproval

- Between 1975 and 1977 there was a substantial decrease in disapproval of marijuana use at any level of frequency. About 14% fewer seniors in the class of 1977 (compared with the class of 1975) disapproved of

TABLE 12

Trends in Proportions Disapproving of Drug Use

Q. *Do you disapprove of people (who are 18 or older) doing each of the following?*[b]	Percent disapproving[a] Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	'79-'80 change
Try marijuana once or twice	47.0	38.4	33.4	33.4	34.2	39.0	*+4.8 ss*
Smoke marijuana occasionally	54.8	47.8	44.3	43.5	45.3	49.7	*+4.4 ss*
Smoke marijuana regularly	71.9	69.5	65.5	67.5	69.2	74.6	*+5.4 sss*
Try LSD once or twice	82.8	84.6	83.9	85.4	86.6	87.3	*+0.7*
Take LSD regularly	94.1	95.3	95.8	96.4	96.9	96.7	*-0.2*
Try cocaine once or twice	81.3	82.4	79.1	77.0	74.7	76.3	*+1.6*
Take cocaine regularly	93.3	93.9	92.1	91.9	90.8	91.1	*+0.3*
Try heroin once or twice	91.5	92.6	92.5	92.0	93.4	93.5	*+0.1*
Take heroin occasionally	94.8	96.0	96.0	96.4	96.8	96.7	*-0.1*
Take heroin regularly	96.7	97.5	97.2	97.8	97.9	97.6	*-0.3*
Try amphetamines once or twice	74.8	75.1	74.2	74.8	75.1	75.4	*+0.3*
Take amphetamines regularly	92.1	92.8	92.5	93.5	94.4	93.0	*-1.4*
Try barbiturates once or twice	77.7	81.3	81.1	82.4	84.0	83.9	*-0.1*
Take barbiturates regularly	93.3	93.6	93.0	94.3	95.2	95.4	*+0.2*
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	21.6	18.2	15.6	15.6	15.8	16.0	*+0.2*
Take one or two drinks nearly every day	67.6	68.9	66.8	67.7	68.3	69.0	*+0.7*
Take four or five drinks nearly every day	88.7	90.7	88.4	90.2	91.7	90.8	*-0.9*
Have five or more drinks once or twice each weekend	60.3	58.6	57.4	56.2	56.7	55.6	*-1.1*
Smoke one or more packs of cigarettes per day	67.5	65.9	66.4	67.0	70.3	70.8	*+0.5*
N =	(2677)	(3234)	(3582)	(3686)	(3221)	(3261)	

NOTE: Level of significance of difference between the two most recent classes: *s*= .05, *ss*= .01, *sss*= .001.

[a]Answer alternatives were: (1) Don't disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.

[b]The 1975 question asked about people who are *"20 or older."*

experimenting, 11% fewer disapproved of occasional use, and 6% fewer disapproved of regular use. Between 1977 and 1980, however, there has been a substantial reversal of that trend, with disapproval of experimental use having risen by nearly 6%, disapproval of occasional use by over 5%, and disapproval of regular use by 9%. Further, most of that change occurred this year, suggesting an acceleration of the trend.

- During recent years personal disapproval for experimenting with barbiturates has been increasing (from 78% in 1975 to 84% in 1979 and again in 1980); and over the last four years disapproval for regular cigarette smoking also has been increasing (from 66% in 1976 to 71% in 1980). Both of these changes coincide with reductions in actual use.

- Disapproval of experimental use of cocaine had declined somewhat, from a high of 82% in 1976 down to 75% in 1979. This year, however, that trend halted and may have reversed slightly, consistent with changes in actual use.

- The small minority who disapprove of trying alcohol once or twice (22% in 1975) had become even smaller by 1977 (16%), but has remained unchanged since.

Attitudes Regarding the Legality of Drug Use

Since the legal restraints on drug use appeared likely to be in a state of flux for some time, we decided at the beginning of the study to measure attitudes about legal sanctions. Table 13 presents a statement of one set of general questions on this subject along with the answers provided by each senior class. The set lists a sampling of illicit and licit drugs and asks whether their use should be prohibited by law. A distinction is consistently made between use in public and use in private—a distinction which proved quite important in the results.

Attitudes in 1980

- Fully 43% believe that cigarette smoking in public places should be prohibited by law—almost as many as think getting drunk in such places should be prohibited (48%).

- Two-thirds (66%) favor legally prohibiting marijuana use in public places, despite the fact that the majority have used marijuana themselves; but less than a third (29%) feel that way about marijuana use in private.

TABLE 13

Trends in Attitudes Regarding Legality of Drug Use

Q. *Do you think that people (who are 18 or older) should be prohibited by law from doing each of the following?*[b]	Percent saying "yes"[a] Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	'79-'80 change
Smoke marijuana in private	32.8	27.5	26.8	25.4	28.0	28.9	+0.9
Smoke marijuana in public places	63.1	59.1	58.7	59.5	61.8	66.1	+4.3 ss
Take LSD in private	67.2	65.1	63.3	62.7	62.4	65.8	+3.4 s
Take LSD in public places	85.8	81.9	79.3	80.7	81.5	82.8	+1.3
Take heroin in private	76.3	72.4	69.2	68.8	68.5	70.3	+1.8
Take heroin in public places	90.1	84.8	81.0	82.5	84.0	83.8	-0.2
Take amphetamines or barbiturates in private	57.2	53.5	52.8	52.2	53.4	54.1	+0.7
Take amphetamines or barbiturates in public places	79.6	76.1	73.7	75.8	77.3	76.1	-1.2
Get drunk in private	14.1	15.6	18.6	17.4	16.8	16.7	-0.1
Get drunk in public places	55.7	50.7	49.0	50.3	50.4	48.3	-2.1
Smoke cigarettes in certain specified public places	NA	NA	42.0	42.2	43.1	42.8	-0.3
N =	(2620)	(3265)	(3629)	(3783)	(3288)	(3224)	

NOTE: Level of significance of difference between the two most recent classes: *s* = .05, *ss* = .01, *sss* = .001.

[a]Answer alternatives were: (1) No, (2) Not sure, and (3) Yes.

[b]The 1975 question asked about people who are *"20 or older."*

- In addition, the great majority believe that the use in public of other illicit drugs than marijuana should be prohibited by law (e.g., 76% in the case of amphetamines and barbiturates, 84% for heroin).

- For all drugs, substantially fewer students believe that use in private settings should be illegal.

Trends in These Attitudes

- From 1975 through 1977 there was a modest decline (from 4% to 9%, depending on the substance) in the proportion of seniors who favored legal prohibition of private use of any of the illicit drugs. Now, however, the evidence suggests that these downward trends have halted and perhaps reversed.

- In particular there has developed increased support for the prohibition of marijuana use in public (up over 4% this year).

The Legal Status of Marijuana

Another set of questions goes into more detail about what legal sanctions, if any, students think should be attached to the use and sale of marijuana. Respondents also are asked to guess how they would be likely to react to legalized use and sale of the drug. While the answers to such a question must be interpreted cautiously, we think it worth exploring how young people think they might respond to such changes in the law. (The questions and responses are shown in Table 14.)

Attitudes and Predicted Response to Legalization: 1980

- Only about one quarter of the seniors believe marijuana use should be entirely legal (26%). Nearly a third (31%) feel it should be treated as a minor violation—like a parking ticket—but not as a crime. Another 16% indicate no opinion, leaving only one quarter (26%) who feel it still should be a crime. In other words, two-thirds of those expressing an opinion believe that marijuana use should not be treated as a criminal offense.

- Asked whether they thought it should be legal to sell marijuana if it were legal to use it, a majority (61%) said "yes." However, nearly all of these respondents would permit sale only to adults, thus suggesting more conservatism on this subject than might generally be supposed.

TABLE 14

Trends in Attitudes Regarding Marijuana Laws

(Entries are percentages)

	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980
Q. *There has been a great deal of public debate about whether marijuana use should be legal. Which of the following policies would you favor?*						
Using marijuana should be entirely legal	27.3	32.6	33.6	32.9	32.1	26.3
It should be a minor violation like a parking ticket but not a crime	25.3	29.0	31.4	30.2	30.1	30.9
It should be a crime	30.5	25.4	21.7	22.2	24.0	26.4
Don't know	16.8	13.0	13.4	14.6	13.8	16.4
N =	(2617)	(3264)	(3622)	(3721)	(3278)	(3211)
Q. *If it were legal for people to USE marijuana, should it also be legal to SELL marijuana?*						
No	27.8	23.0	22.5	21.8	22.9	25.0
Yes, but only to adults	37.1	49.8	52.1	53.6	53.2	51.8
Yes, to anyone	16.2	13.3	12.7	12.0	11.3	9.6
Don't know	18.9	13.9	12.7	12.6	12.6	13.6
N =	(2616)	(3279)	(3628)	(3719)	(3280)	(3210)
Q. *If marijuana were legal to use and legally available, which of the following would you be most likely to do?*						
Not use it, even if it were legal and available	53.2	50.4	50.6	46.4	50.2	53.3
Try it	8.2	8.1	7.0	7.1	6.1	6.8
Use it about as often as I do now	22.7	24.7	26.8	30.9	29.1	27.3
Use it more often than I do now	6.0	7.1	7.4	6.3	6.0	4.2
Use it less than I do now	1.3	1.5	1.5	2.7	2.5	2.6
Don't know	8.5	8.1	6.6	6.7	6.1	5.9
N =	(2602)	(3272)	(3625)	(3711)	(3277)	(3210)

- High school seniors predict that they would be little affected by the legalization of the sale and use of marijuana. Over half of the respondents (53%) say that they would not use the drug even if it were legal to buy and use, and another 30% indicate they would use it about as often as they do now, or less. Only 4% say they would use it more often than at present and only another 7% say they would try it. About 6% say they do not know how they would react.

Trends in Attitudes and Predicted Responses

- Between 1976 and 1979 seniors' preferences for decriminalization or legalization remained quite constant; but this year there was a sharp drop in the proportion favoring outright legalization (down from 32% in 1979 to 26% in 1980).

- Also reflecting the increased conservatism about marijuana this year, somewhat fewer would support legalized sale even if use were to be made legal (down 3.1% from 1979).

- The predictions of personal marijuana use under legalization, discussed above, have been quite similar for all six high school classes. The slight shifts being observed are mostly attributable to the changing proportions of seniors who actually use marijuana.

THE SOCIAL MILIEU

The preceding section dealt with seniors' attitudes about various forms of drug use. Attitudes about drugs, as well as drug-related behaviors, obviously do not occur in a social vacuum. Drugs are discussed in the media; they are a topic of considerable interest and conversation among young people; they are also a matter of much concern to parents, concern which often is strongly communicated to their children. Young people also are known to be affected by the actual drug-taking behaviors of their friends and acquaintances, as well as by the availability of the various drugs. This section presents data on several of these relevant aspects of the social milieu.

We begin with two sets of questions about parental and peer attitudes, questions which closely parallel the questions about respondents' own attitudes about drug use, discussed in the preceding section. (These two sets of questions are displayed in Tables 15 and 16.) Since parental attitudes are now only included in the survey intermittently, those discussed here are based on the 1979 results.

Perceived Attitudes of Parents and Friends

Current Perceptions of Parental Attitudes

- Based on our most recent (1979) measures of perceived parental attitudes, a large majority of seniors feel that their parents would disapprove or strongly disapprove of their exhibiting any of the drug use behaviors shown in Table 15.

- Over 97% of seniors say that their parents would disapprove or strongly disapprove of their smoking marijuana regularly, even trying LSD or amphetamines, or having four or five drinks every day. (Although the questions did not include more frequent use of LSD or amphetamines, or any use of heroin, it is obvious that if such behaviors were included in the list virtually all seniors would indicate parental disapproval.)

TABLE 15

Trends in Parental Disapproval of Drug Use

Q. *How do you think your parents would feel about you...*	Percent disapproving[a] Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980
Trying marijuana once or twice	90.8	87.4	85.8	83.2	84.9	NA
Smoking marijuana occasionally	95.6	93.0	92.5	90.8	93.2	NA
Smoking marijuana regularly	98.1	96.3	96.5	95.6	97.2	NA
Trying LSD once or twice	99.0	97.4	98.1	97.5	98.8	NA
Trying an amphetamine once or twice	98.0	97.1	97.2	96.7	97.9	NA
Taking one or two drinks nearly every day	89.5	90.0	92.2	88.9	91.8	NA
Taking four or five drinks every day	97.2	96.5	96.5	96.3	97.4	NA
Having five or more drinks once or twice every weekend	85.3	85.9	86.5	82.6	84.5	NA
Smoking one or more packs of cigarettes per day	88.5	87.6	89.2	88.7	91.3	NA
Approx. N =	(2546)	(2807)	(3014)	(3054)	(2748)	(NA)

NOTE: NA indicates question not asked.

[a]Answer alternatives were: (1) Not disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.

TABLE 16

Trends in Proportion of Friends Disapproving of Drug Use

Q. *How do you think your close friends feel (or would feel) about you...*	Percent saying friends disapprove[a]						
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	'79-'80 change
Trying marijuana once or twice	44.8	NA	42.3	NA	41.4	42.6	+1.2
Smoking marijuana occasionally	54.0	NA	48.2	NA	47.4	50.6	+3.2
Smoking marijuana regularly	70.4	NA	64.5	NA	65.6	72.0	+6.4 sss
Trying LSD once or twice	83.6	NA	84.6	NA	85.6	87.4	+1.8
Trying an amphetamine once or twice	76.6	NA	78.1	NA	78.8	78.9	+0.1
Taking one or two drinks nearly every day	59.4	NA	63.2	NA	63.2	70.5	+7.3 sss
Taking four or five drinks every day	79.9	NA	78.8	NA	79.2	87.9	+8.7 sss
Having five or more drinks once or twice every weekend	50.3	NA	48.7	NA	46.6	50.6	+4.0 s
Smoking one or more packs of cigarettes per day	55.3	NA	60.0	NA	65.1	74.4	+9.3 sss
Approx. N =	(2488)	(NA)	(2971)	(NA)	(2716)	(2766)	

NOTE: NA indicates question not asked.

[a]Answer alternatives were: (1) Not disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.

- While respondents feel that marijuana use would receive the least parental disapproval of all of the illicit drugs, even experimenting with it still is seen as a parentally disapproved activity by the great majority of the seniors (85%). Assuming that the students are generally correct about their parents' attitudes, these results clearly show that there remains a rather massive generational difference of opinion about this drug.

- Also likely to be perceived as rating high parental disapproval (around 92% disapproval) are occasional marijuana use, taking one or two drinks nearly every day, and pack-a-day cigarette smoking.

- Slightly lower proportions of seniors (85%) think their parents would disapprove of their having five or more drinks once or twice every weekend. This happens to be exactly the same percentage as say their parents would disapprove of simply experimenting with marijuana.

Current Perceptions of Friends' Attitudes

- A parallel set of questions asked respondents to estimate their friends' attitudes about drug use (Table 16). These questions ask "How do you think your close friends feel (or would feel) about you ...". The highest levels of disapproval are associated with heavy daily drinking (88% think friends would disapprove), trying LSD (87%), and trying an amphetamine (79%). Presumably, if heroin were on the list it would receive the highest peer disapproval; and, judging from respondents' own attitudes, barbiturates and cocaine would be roughly as unpopular among peers as amphetamines.

- A substantial majority think their friends would disapprove if they smoked marijuana daily (72%), smoked a pack or more of cigarettes daily (74%), or took one or two drinks daily (71%).

- Just about half (51%) feel that friends would disapprove of occasional marijuana smoking or heavy drinking on weekends, and slightly fewer (43%) feel their friends would disapprove trying marijuana once or twice.

- In sum, peer norms differ considerably for the various drugs and for varying degrees of involvement with those drugs, but overall they tend to be relatively conservative. The great majority of seniors have friendship circles which do not condone use of the

illicit drugs other than marijuana, and nearly two-thirds feel that their friends would disapprove of regular marijuana use or daily drinking.

A Comparison of the Attitudes of Parents, Peers, and Respondents Themselves

- A comparison of the perceptions of friends' disapproval with perceptions of parents' disapproval shows several things.

- First there is rather little variability among different students in their perceptions of their parent's attitudes: on any of the drug behaviors listed nearly all say their parents would disapprove. Nor is there much variability in parental attitudes among the different drugs: peer norms vary much more from drug to drug. The net effect of these facts is likely to be that peer norms have a much greater chance of explaining variability in the respondent's own individual attitudes or use than parental norms, simply because they vary more.

- Despite there being less variability in parental attitudes, the ordering of drug use behaviors is much the same for them as for peers (e.g., among the illicit drugs the highest frequencies of perceived disapproval are for trying LSD or amphetamines, while the lowest frequencies are for trying marijuana).

- A comparison with the seniors' own attitudes regarding drug use (see Figures M and N) reveals that on the average they are much more in accord with their peers than with their parents. The differences between seniors' own disapproval ratings and those of their parents tend to be large, with parents seen as more conservative overall in relation to every drug, licit or illicit. The largest difference occurs in the case of marijuana experimentation, where only 39% say they disapprove but 85% say their parents would.

Trends in Perceptions of Parents' and Friends' Views

- Several important changes in the perceived attitudes of others have been taking place recently—and particularly among peers this year (see Figures M and N).

- For each level of marijuana use—trying once or twice, occasional use, regular use--there had been a drop in perceived disapproval for both parents and friends up

FIGURE M

Trends in Disapproval of Illicit Drug Use
Seniors, Parents, and Peers

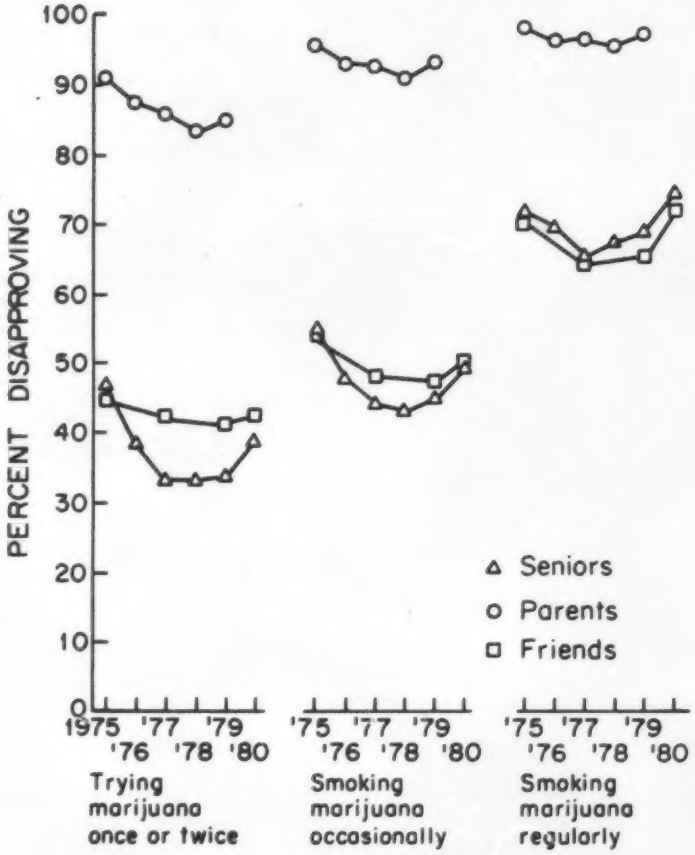


FIGURE M (cont.)

Trends in Disapproval of Illicit Drug Use
Seniors, Parents, and Peers

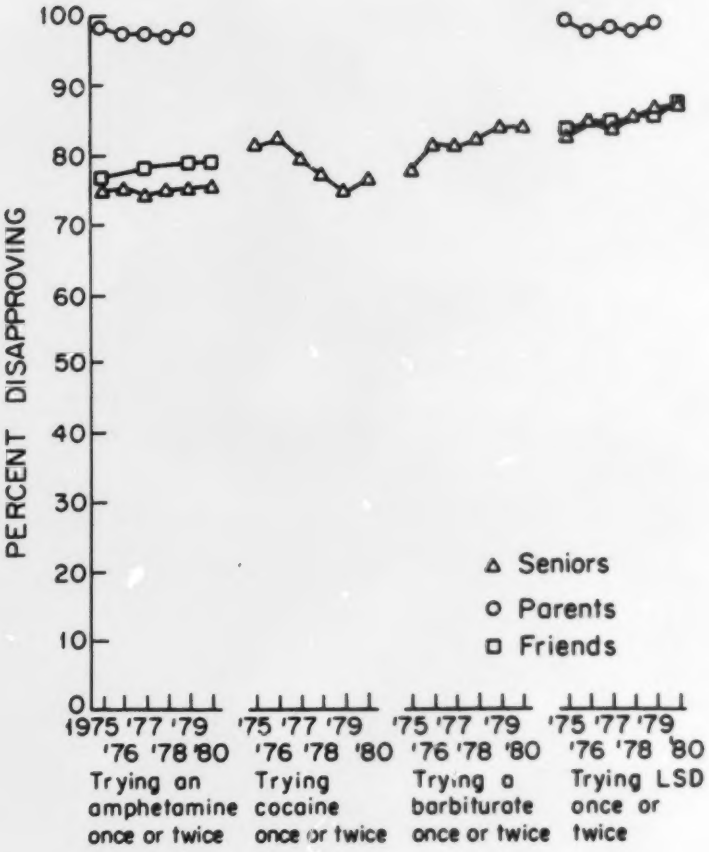
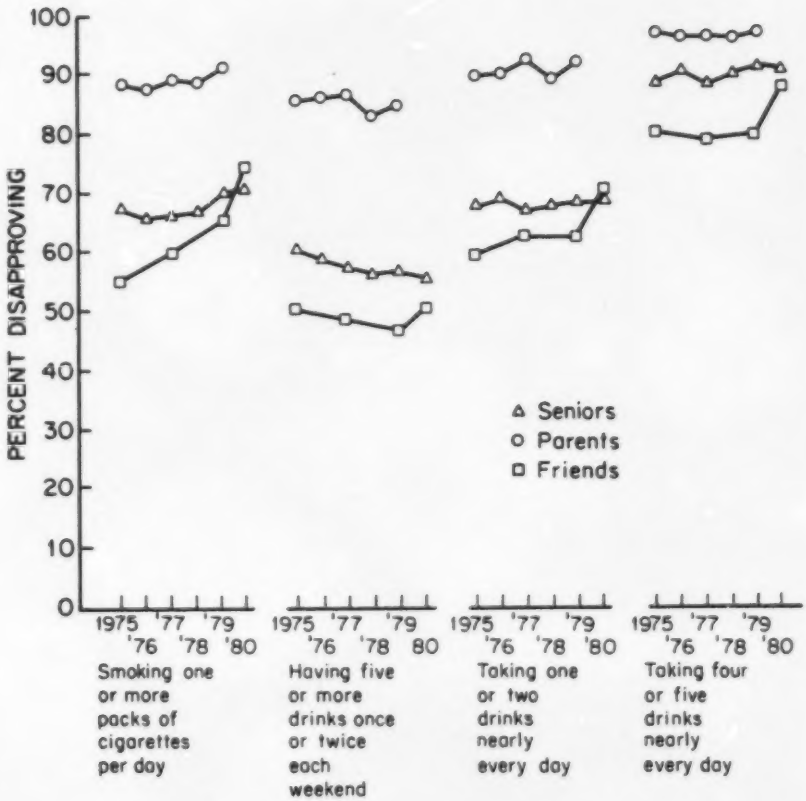


FIGURE N

Trends in Disapproval of Licit Drug Use
Seniors, Parents, and Peers



until 1977. We know from our other findings that these perceptions correctly reflected actual shifts in the attitudes of their peer groups—that is, that acceptance of marijuana was in fact increasing among seniors (see Figure M). There is little reason to suppose such perceptions are less accurate in reflecting shifts in parents' attitudes. Therefore, we conclude that the social norms regarding marijuana use among adolescents had been relaxing. However, consistent with the seniors' reports about their own attitudes, the liberal shift in these social norms has been reversed in the last several years, especially among peers. Further, the reversal has been particularly sharp in relation to regular marijuana use (which showed a 6% increase in peer disapproval this year).

- Perceived parental norms regarding most other drugs have shown little or no change since 1975; but peer norms for LSD and barbiturates have been very gradually toughening. (It should be noted, however, that parental and peer attitudes about cocaine are not included in the questions. If they had been, they probably would have shown a shift toward greater acceptance, at least until this year.)

- By far the most dramatic change in perceptions of peer norms has occurred in relation to regular cigarette smoking. The proportion of seniors saying that their friends would disapprove of them smoking a pack-a-day or more has risen from 55% in 1975 to 74% in 1980. A portion of this shift may be attributed to some change in the underlying reality. For example, the proportion of seniors expressing personal disapproval of pack-a-day smoking has risen from 66% in 1977 to 71% in 1980. But the fact that the shift in peer norms has been much larger than any change in personal diapproval ratings suggests that a convergence with reality—a reduction of pluralistic ignorance—accounts for most of the rise in their perceptions that friends would disapprove pack-a-day smoking. Perhaps more young people are now openly expressing their attitudes about smoking, thus making their friends more aware of those attitudes. In any case, this dramatic change in shared peer norms may be playing an important role in reducing cigarette smoking.

- Alcohol represents the one other drug on which there had been some discrepancy between the seniors' own attitudes and what they perceived to be those of their close friends—a discrepancy which for the first time this year narrowed substantially (Figure N). There was a substantial rise in 1980 in the proportion saying their

peers would disapprove either moderate or heavy daily drinking (up 7% and 9%, respectively). Weekend binge drinking, which had been becoming slightly more accepted by peers, also showed a shift toward greater disapproval this year (up 4%). Recall that seniors' characterizations of their own attitudes about alcohol changed very little this year, their own reports of binge drinking remained constant, and their reported daily use declined only slightly. However, these shifts in perceived peer norms may prove predictive of a decline in use next year.

- It is interesting to note that the several large shifts this year in perceived peer norms all relate to the frequent or regular use of various drugs. The three questions having to do with experimentation showed little change (i.e., for marijuana, LSD, and amphetamines).

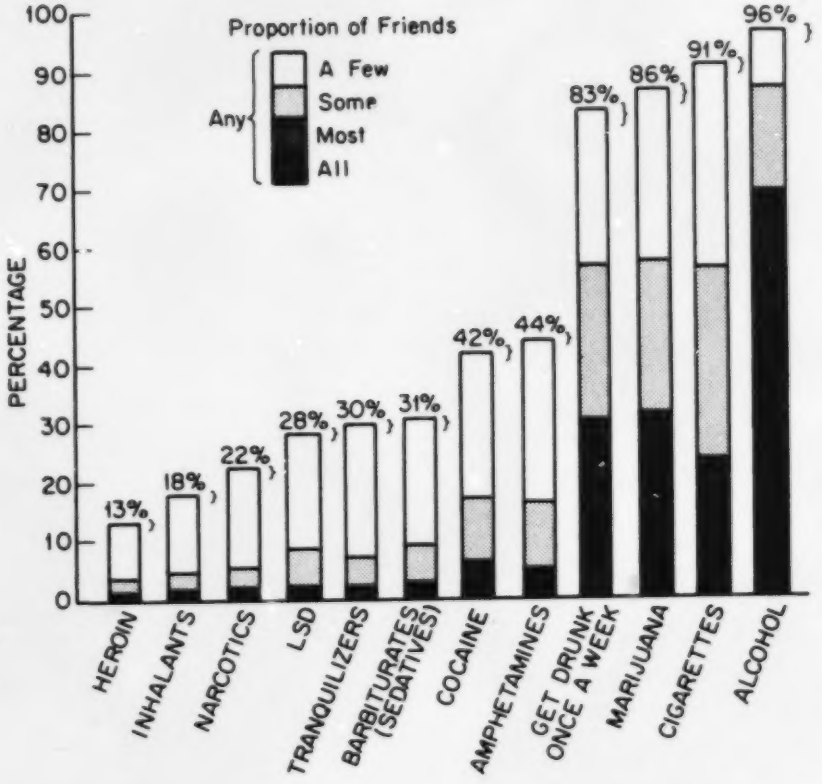
Exposure to Drug Use by Friends and Others

It is generally agreed that much of youthful drug use is initiated through a peer social-learning process; and research has shown a high correlation between an individual's illicit drug use and that of his or her friends. Such a correlation can, and probably does, reflect several different causal patterns: (a) a person with friends who use a drug will be more likely to try the drug; (b) conversely, the individual who is already using a drug will be likely to introduce friends to the experience; and (c) one who is already a user is more likely to establish friendships with others who also are users.

Given the potential importance of exposure to drug use by others, we felt it would be useful to monitor seniors' association with others taking drugs, as well as seniors' perceptions about the extent to which their friends use drugs. Two sets of questions, each covering all or nearly all of the categories of drug use treated in this report, asked seniors to indicate (a) how often during the past twelve months they were around people taking each of the drugs to get high or for "kicks," and (b) what proportion of their own friends use each of the drugs. (The questions dealing with friends' use are shown in Table 17. The tables dealing with direct exposure to use may be found in the full volume.) Obviously, responses to these two questions are highly correlated with the respondents' own drug use; thus, for example, seniors who have recently used marijuana are much more likely to report that they have been around others getting high on marijuana, and that most of their friends use it.

FIGURE O

Proportion of Friends Using Each Drug as Estimated by Seniors, in 1980



Exposure to Drug Use in 1980

- A comparison of responses about friends' use, and about being around people in the last twelve months who were using various drugs to get high, reveals a high degree of correspondence between these two indicators of exposure. For each drug, the proportion of respondents saying "none" of their friends use it is roughly equal to the proportion who say that during the last twelve months they have not been around anyone who was using that drug to get high. Similarly, the proportion saying they are "often" around people getting high on a given drug is roughly the same as the proportion reporting that "most" or "all" of their friends use that drug.

- Reports of exposure and friends' use closely parallel the figures on seniors' own use (compare Figures A and O). It thus comes as no surprise that the highest levels of exposure involve alcohol (a majority "often" around people using it to get high) and marijuana (34% "often" and 27% "occasionally" around people using it to get high).

- What may come as a surprise is that fully 30% of all seniors say that most or all of their friends get drunk at least once a week! (This is consistent, however, with the fact that 41% said they personally had taken five or more drinks in a row during the prior two weeks.)

- For each of the drugs other than marijuana or alcohol, fewer than one in twelve report they are "often" exposed to people using it to get high, fewer than one in four report that it occurs as much as "occasionally," and a majority (usually a large majority) report no such exposure in the previous year.

Recent Trends in Exposure to Drug Use

- During the two-year interval from 1976 to 1978, seniors' reports of exposure to marijuana use increased in just about the same proportion as percentages on actual monthly use. In 1979 both exposure to use and actual use stabilized; and this year both dropped. The proportion saying they are often around people using marijuana dropped from 39% to 34% between 1979 and 1980.

- Following a somewhat similar pattern, cocaine had a consistent increase from 1976 to 1979 in the proportions exposed to users. The jump in both exposure and use was particularly sharp last year. This year both have nearly, but not quite, stabilized.

TABLE 17

Trends in Proportions of Friends Using Drugs

(Entries are percentages)

Q. *How many of your friends would you estimate...*	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	'79-'80 change
Smoke marijuana							
% saying none	17.0	17.1	14.1	13.9	12.4	13.6	+1.2
% saying most or all	30.3	30.6	32.3	35.3	35.5	31.3	-4.2 **
Use inhalants							
% saying none	75.7	81.4	81.1	80.0	80.9	82.2	+1.3
% saying most or all	1.1	1.1	1.0	1.1	1.1	1.2	+0.1
Take nitrites							
% saying none	NA	NA	NA	NA	78.4	81.0	+3.6 *
% saying most or all	NA	NA	NA	NA	1.9	1.3	-0.6
Take LSD							
% saying none	63.5	69.4	68.1	70.1	71.1	71.9	+0.8
% saying most or all	2.7	2.8	3.0	2.0	1.9	1.8	-0.1
Take other psychedelics							
% saying none	58.8	69.7	68.6	70.8	71.8	71.8	0.0
% saying most or all	4.7	3.0	2.8	2.0	2.2	2.2	0.0
Take PCP							
% saying none	NA	NA	NA	NA	72.2	77.8	+5.6 ***
% saying most or all	NA	NA	NA	NA	1.7	1.6	-0.1
Take cocaine							
% saying none	66.4	71.2	69.9	66.8	61.1	58.4	-2.7
% saying most or all	3.4	3.2	3.6	4.0	6.0	6.1	+0.1
Take heroin							
% saying none	84.8	86.4	87.1	85.7	87.1	87.0	-0.1
% saying most or all	0.7	0.8	0.7	0.9	0.5	1.0	+0.5
Take other narcotics							
% saying none	71.2	75.9	76.3	76.8	76.9	77.6	+0.7
% saying most or all	2.1	2.2	1.7	1.4	1.5	1.7	+0.2
Take amphetamines							
% saying none	49.0	57.8	58.7	59.3	59.3	56.1	-3.2 *
% saying most or all	5.9	5.6	4.1	4.7	4.3	4.8	+0.5

(Table continued on next page)

TABLE 17 (cont.)

Trends in Proportions of Friends Using Drugs

(Entries are percentages)

	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	'79-'80 change
Take barbiturates							
% saying none	55.0	63.7	65.3	67.5	69.3	69.5	+0.2
% saying most or all	4.3	3.5	3.0	2.3	2.1	2.6	+0.5
Take quaaludes							
% saying none	68.3	73.0	71.7	73.0	72.3	67.5	-4.8 **
% saying most or all	3.0	2.8	2.9	2.2	2.8	3.6	+0.8
Take tranquilizers							
% saying none	54.4	63.7	62.2	65.2	68.0	70.3	+2.3
% saying most or all	3.5	3.1	2.7	1.8	2.0	1.9	-0.1
Drink alcoholic beverages							
% saying none	3.3	4.9	5.6	5.1	4.6	3.9	-0.7
% saying most or all	68.4	64.7	66.2	68.9	68.5	68.9	+0.4
Get drunk at least once a week							
% saying none	17.6	19.3	19.0	18.0	16.7	16.9	+0.2
% saying most or all	30.1	26.6	27.6	30.2	32.0	30.1	-1.9
Smoke cigarettes							
% saying none	4.8	6.3	6.3	6.9	7.9	9.4	+1.5
% saying most or all	41.5	36.7	33.9	32.2	28.6	23.3	-5.3 ***
N =	(2640)	(2929)	(3184)	(3247)	(2933)	(2987)	

NOTES: Level of significance of difference between the two most recent classes:
* = .05, ** = .01, *** = .001.

NA indicates data not available.

- This year there was a statistically significant decrease in exposure to others using tranquilizers, as actual use continues to decline.

- There has been a gradual decrease in exposure to barbiturates and LSD throughout the past five years (table not shown).

- Trend data are available for the first time this year on exposure to the use of PCP or the nitrites. In both cases, exposure to friends' use dropped significantly between 1979 and 1980.

- The proportion having some friends who use amphetamines rose some 3% this year. (Recall that actual use also rose this year.)

- Paralleling this year's increase in the use of methaqualone is an increase of 5% in the proportion saying some of their friends use.

- The proportion saying that "most or all" of their friends smoke cigarettes has dropped steadily, from 37% in 1976 to 23% in 1980. (During this period actual use has dropped markedly and 19% more seniors now perceive their friends as disapproving regular smoking.)

- The proportion saying most or all of their friends get drunk at least once a week had been increasing steadily, from 27% in 1976 to 32% in 1979. This year it declined slightly (to 30%)—a year in which the frequency of self-reported binge drinking stabilized.

Perceived Availability of Drugs

One set of questions asks for estimates of how difficult it would be to obtain each of a number of different drugs. The answers range across five categories from "probably impossible" to "very easy." While no systematic effort has been undertaken to assess the validity of these measures, it must be said that they do have a rather high level of face validity—particularly if it is the subjective reality of "perceived availability" which is purported to be measured. It also seems quite reasonable to us to assume that perceived availability tracks actual availability to some extent.

Perceived Availability in 1980

- There are substantial differences in the reported availability of the various drugs. In general, the more widely used drugs are reported to be available by the highest proportion of the age group, as would be expected (see Table 18 and Figure P).

- Marijuana appears to be almost universally available to high school seniors; nearly 90% report that they think it would be "very easy" to "fairly easy" for them to get—roughly 30% more than the number who report ever having used it.

- After marijuana, the students indicate that the psychotherapeutic drugs are the most available to them: amphetamines are seen as available by 61%, tranquilizers by 59%, and barbiturates by 49%.

- Nearly half of the seniors (48%) now see cocaine as available to them.

- Hallucinogens and opiates other than heroin are reported as available by only about three out of every ten seniors (35% and 29%, respectively).

- Heroin is seen by the fewest seniors (21%) as being fairly easy to get.

- The majority of "recent users" of all drugs—those who have illicitly used the drug in the past year—feel that it would be fairly easy for them to get that same type of drug.

- There is some variation by drug class, however. Most (from 82% to 98%) of the recent users of marijuana, psychotherapeutic drugs (amphetamines, barbiturates, and tranquilizers), or cocaine feel they could get those same drugs fairly easily. Smaller majorities of those who used hallucinogens (72%) or other opiates (61%) feel it would be fairly easy for them to get those drugs again. And, of the recent users of heroin, only about half think it would be fairly easy to get some more.

TABLE 18

Trends in Reported Availability of Drugs

Q. *How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?*	Percent saying drug would be "Fairly easy" or "Very easy" for them to get[a]						
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	'79-'80 change
Marijuana	87.8	87.4	87.9	87.8	90.1	89.0	-1.1
LSD	46.2	37.4	34.5	32.2	34.2	35.3	+1.1
Some other psychedelic	47.8	35.7	33.8	33.8	34.6	35.0	+0.4
Cocaine	37.0	34.0	33.0	37.8	45.5	47.9	+2.4
Heroin	24.2	18.4	17.9	16.4	18.9	21.2	+2.3
Some other narcotic (including methadone)	34.5	26.9	27.8	26.1	28.7	29.4	+0.7
Amphetamines	67.8	61.8	58.1	58.5	59.9	61.3	+1.4
Barbiturates	60.0	54.4	52.4	50.6	49.8	49.1	-0.7
Tranquilizers	71.8	65.5	64.9	64.3	61.4	59.1	-2.3
N =	(2627)	(3163)	(3562)	(3598)	(3172)	(3240)	

NOTE: Level of significance of difference between the two most recent classes: * = .05, ** = .01, *** = .001.

[a]Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, and (5) Very easy.

Trends in Perceived Availability

- Overall, there were no dramatic changes in the perceived availability of the various drugs over the past year.

- Perceptions of marijuana availability have remained quite steady across the last six high school classes (at between 87% and 90% of the entire sample).

- Since 1977 there has been a substantial increase in the perceived availability of cocaine—with a jump of 5% two years ago, another 8% last year, but only 2% this year (see Figure P and Table 18). Among recent cocaine users there also was a substantial increase observed over the three year interval (data not shown).

- Tranquilizers and barbiturates continued their moderate rates of decline; while amphetamines and hallucinogens continued to increase very modestly in availability again this year. (None of these one-year changes is statistically significant.)

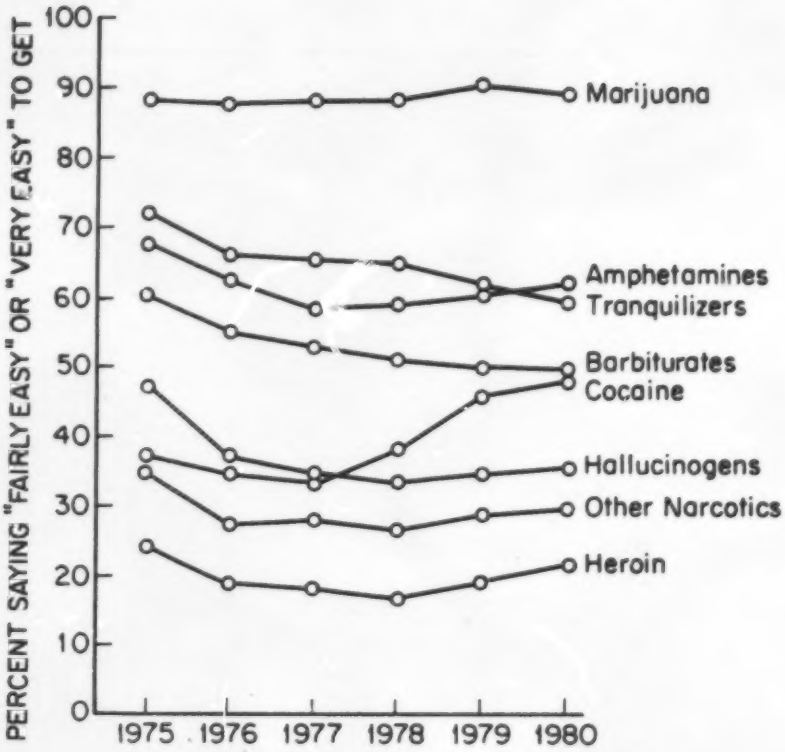
- The perceived availability of heroin has increased over the past two years, from 16% in 1978 to 21% in 1980.

Implications for Validity of Self-Reported Usage Questions

- We have noted a high degree of correspondence in the aggregate level data presented in this report among seniors' self-reports of their own drug use, their reports concerning friends' use, and their own exposure to use. Drug-to-drug comparisons in any given year across these three types of measures tend to be highly parallel, as do the changes from year to year. We take this consistency as additional evidence for the validity of the self-report data, since there should be less reason to distort answers on friends' use, or general exposure to use, than to distort the reporting of one's own use.

FIGURE P

Trends in Perceived Availability of Drugs



OTHER RECENT FINDINGS FROM THE STUDY

This year for the first time we are adding this closing section summarizing key results from the study which have been published elsewhere. Obviously, only brief synopses are appropriate for inclusion here. However, the interested reader may secure the relevant articles from the published literature or write to the authors at Room 2030, Institute for Social Research, The University of Michigan, Ann Arbor, Michigan 48109.

Correlates of Drug Use

One major purpose of the Monitoring the Future project, as illustrated in the present report, is to provide an accurate picture of current drug use and recent trends. But another major purpose is to develop a better understanding of factors which may be among the important causes and/or consequences of use. An important step in this process is to determine the extent to which other variables correlate with various kinds of drug use. An analysis of the relationship between drug use and a number of background, educational, occupational, and lifestyle factors was completed during the past year; some of the highlights are presented below.*

- One key finding is that for the most part the same pattern of background and lifestyle factors which predicts (or, more accurately, correlates with) cigarette use and alcohol use also predicts use of marijuana and other illicit drugs. This is not surprising, since the use of one substance is strongly related to the use of other substances; but it is convenient for present purposes, because it means that we can usually speak of factors relating to drug use in general.

---

*Many of the findings appear in "Smoking, Drinking, and Drug Use Among American High School Students: Correlates and Trends 1975-1979" by J. G. Bachman, L. D. Johnston, and P. M. O'Malley, American Journal of Public Health, January, 1981. A more extended report by the same authors is Monitoring the Future Occasional Paper 8: Correlates of Drug Use, Part I: Selected Measures of Background, Recent Experiences, and Lifestyle Orientations, 1980.

- Several background factors were explored as possible predictors of drug use. Parents' educational level, which serves as an indicator of overall socioeconomic level, shows very little relationship with drug use among high school seniors. Number of parents in the home shows some relationship with drug use—use is slightly higher among seniors who are not living with both parents. Other background factors which have already been documented in the present report series are region and urbanicity. Sex differences also have been documented extensively in the present report, but one particular finding from the correlational analysis is worth repeating here: If one considers that there are male-female differences on many drug-related dimensions such as grades, truancy, and religious commitment, one would accurately "predict" lower female usage rates for alcohol and the illicit drugs. But one would also predict less use of cigarettes, which would not be accurate. Females can thus be described as "overachievers" in terms of cigarette smoking—they do more than would be predicted based on their other characteristics—and their degree of "overachievement" rose steadily between 1975 and 1979. It should also be mentioned that they are "underachievers" in relation to alcohol use—that is, they drink even less than would be predicted by those other factors—but their degree of "underachievement" decreased between 1975 and 1979.

- Four aspects of educational experience were examined as correlates of drug use. We have noted in this report that drug use is generally lower for those planning to complete college, and the same is true for those in the college preparatory curriculum. High school grades also show a negative relationship with drug use, especially cigarette smoking. Truancy bears a strong positive relationship to drug use of all types.

- Two aspects of occupational experience, amount of hours worked and income, are both positively related to drug use. Income, of course, can provide the means of paying for drugs; but even when income is controlled statistically, there is still some tendency for higher drug use among seniors who work longer hours in their (part time) jobs.

- Several dimensions of lifestyle experience were included in these analyses of correlates of drug use (many others will appear in future analyses). Drug use is well below average among seniors with high levels of religious commitment. It is also below average among seniors who describe their political orientation as

conservative, rather than liberal or radical. (There is, however, no clear relationship between drug use and political party preference.) Frequent evenings out for fun and recreation (and also frequent dating) are positively and strongly correlated with drug use.

- Each of the patterns of relationship summarized above was examined separately for the senior classes of 1975 through 1979, and in general the correlations were found to be highly stable from one year to the next. One exception involves cocaine use, which increased substantially from 1975 through 1979, and which also showed a pattern of increasingly strong correlations. But this pattern of emerging relationships with cocaine use involved the same familiar set of variables which have correlated consistently with the use of alcohol, marijuana, and other illicit drugs. It thus appears that the kinds of young people most "at risk" tend to remain much the same, while the kinds and amounts of substances used shift somewhat from year to year.

Other Correlates and Trend Data

Hundreds of correlates of drug use, without accompanying interpretation, may also be found in the series of annual volumes from the study entitled Monitoring the Future: Questionnaire Responses from the Nation's High School Students.* For each year since 1975, a separate volume presents univariate and selected bivariate distributions on all questions contained in the study. Many variables dealing with drugs—variables not discussed here—are contained in that series; and bivariate tables are provided for all questions each year distributed against an index of lifetime illicit drug involvement. A special cross-time reference index is contained in each volume to facilitate locating the same question across different years. One can thus derive trend data on some 1500 to 2000 variables for the entire sample, or for important sub-groups (based on sex, race, region, college plans, or drug involvement).

The Daily Marijuana User

Charting the trends in frequent marijuana use, and bringing them to the attention of policy-makers and the public, have been among the more important functions of the present series of reports. Over the past year, we also began a more intensive examination of such users,

---

*This series is available from the Publications Division, Institute for Social Research, The University of Michigan, Ann Arbor, Michigan 48109.

utilizing data not only from seniors, but also from longitudinal follow-ups during the post-high school years.* This in-depth examination will continue over the coming year; in the meantime, our early findings are summarized briefly below.

- As might be inferred from the findings cited earlier for all drug users, daily marijuana users (defined as people who smoked marijuana on twenty or more occasions in the prior thirty days) are disproportionately males, whites, city dwellers, and the noncollege-bound. They also tend to get below-average grades, be truant more often than average, have low religious commitment, and view themselves as more liberal than average politically. In particular, the daily users spend a lot of their free time outside the home. Thus, among seniors who go out for "fun and recreation" six to seven nights a week, fully a third are daily marijuana users.

- Among the 19 to 22 year-olds studied in the follow-up surveys, between 10% and 11% were daily users in 1980. This reflects a 2.6% increase from their average rates of use when they were seniors in earlier years.

- Daily use was found to be highest among those graduates living away from home; in civilian employment, military service, or unemployed; without children and unmarried. Full-time students have one of the lower rates of daily use (8.3%), but they showed one of the largest increases after high school (up from 4.5% in senior year). Conversely, the unemployed and those in military service (who showed quite high rates of use after high school) actually showed rather little change from their already-high rates in high school.

- The increased role responsibilities of marriage and parenthood appear to have a damping effect on daily use. In the face of an overall 2.6% increase in daily use post-high school for the entire sample of 19 to 22 year-olds, those who were married showed virtually no increase and those with children actually had a decline in use.

- Leaving the parental home was associated with a larger than average increase in daily use (up 3.9%, vs. an increase of 1.3% for those remaining in the parental home).

---

*See L. D. Johnston, "The Daily Marijuana User," paper delivered at the first annual meeting of the National Alcohol and Drug Coalition, Washington, D. C., September 18, 1980 (available from the author).

- Daily marijuana users are much more likely than their peers to be current users of other drugs, and to have started using drugs at an early age. A quarter of them drink alcohol daily (27%) and fully six in every ten are daily cigarette smokers. (Thus, for the majority of daily users any deleterious effects of their marijuana smoking will be combined, perhaps synergistically, with the harmful effects of their cigarette smoking.)

- In terms of quantities used, among those 1979 seniors able to estimate ounces of marijuana used in the previous month, a quarter said they personally consumed about an ounce, about another quarter (28%) said about two ounces, and another quarter (28%) said three or more ounces. When asked how many "joints" they averaged per day, they gave a modal answer of two to three joints per day. About a third, however, say four or more joints per day, with the result being that the overall average daily intake is about 3.5 joints per day. (These results, like nearly all of the others mentioned here, are closely replicated in the nineteen to twenty-two year old sample.)

- The stability of the marijuana using habit among these recent class cohorts is of particular significance, not only because it will tell something about the drug using behaviors of older segments of the population in future years, but because the potential for cumulative physiological and psychological effects rises with the longevity of the habit. Roughly 60% of those in each class who were daily users in senior year were daily users a year later. By four years after high school 51% of daily using seniors in the Class of 1975 were still using daily, with an additional 34% being current, though not daily, users.

- Compared to less frequent users, daily users tend disproportionately to mention psychological coping motives in explaining their own use—such things as "to get away from my problems," "to get through the day," or "because of anger and frustration."

- On a checklist of fifteen problems which might result from marijuana use, the ones checked most frequently by seniors using daily in 1979 were (a) that it caused them to have less energy (42%), (b) that it hurt their relationships with their parents (38%), (c) that it hurt their school and/or job performance (34%), and (d) that it caused them to be less interested in other activities (31%).

☆ U.S. GOVERNMENT PRINTING OFFICE: 1981—341-166:6170